SYMBOLS

SECTION TAG — 1 / A3.2 — DETAIL NUMBER / SHEET NUMBER

INTERIOR ELEVATION — 5 / 8 A8.8 6 / 7 — ELEVATION NUMBER / SHEET NUMBER

EXTERIOR ELEVATION — A2.8 6 — ELEVATION NUMBER / SHEET NUMBER

DETAIL TAG — 1 / A8.8

PARTITION/BULKHEAD TAG — P3 — (REFER TO A1.0 FOR TYPES)

ROOM TAG — OFFICE — ROOM NAME; B130 — ROOM NUMBER

CASEWORK TAG — 1235 / 3634 — BASIS OF DESIGN MODEL NUMBER (CUSTOM/MODIFIED CABINETS HAVE "M" SUFFIX); CABINET NOMINAL HEIGHT; CABINET WIDTH

WINDOW TAG — W13

CURTAIN WALL TAG — CW13

STOREFRONT TAG — AL13

INTERIOR WINDOW TAG — IW13

DOOR TAG — D336A-1

ROOF TAG — A

NEW DOOR / **EXISTING DOOR**

EXISTING COL. LINE — 1 — OCTAGON; ITALIC TEXT

NEW COL. LINE — 1 — CIRCLE; STANDARD TEXT

HATCH PATTERNS

METAL STUD	BATT INSUL.	CMU	FINISHED WOOD
RIGID INSULATION	CONCRETE	GRAVEL	STEEL
BRICK	ROUGH WOOD	EARTH	PLYWOOD

ABBREVIATIONS

(NOT ALL ABBREVIATIONS APPEAR IN PROJECT)

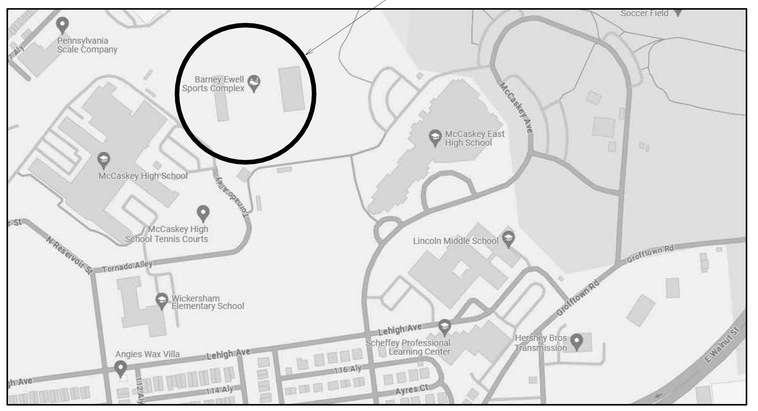
&	AND
@	AT
AB	ANCHOR BOLT
AC	AIR CONDITIONING
ACC	ACCESSIBLE
ACM	ALUMINUM COMPOSITE MATERIAL
ACOUST	ACOUSTICAL
ACT	ACOUSTIC CEILING TILE
AD	AREA DRAIN
ADJ	ADJACENT
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AGG	AFTER GENERAL GRADIING
AGGR	AGGREGATE
ALT	ALTERNATE
ALUM	ALUMINUM
ANOD	ANODIZED
APC	ACOUSTICAL PANEL CEILING
APPROX	APPROXIMATE
ARCH	ARCHITECTURAL
ASPH	ASPHALT
ATTN	ATTENTION
AUTO	AUTOMATIC
AV	AUDIOVISUAL
BD	BOARD
BIT	BITUMINOUS
BLDG	BUILDING
BLK	BLOCK
BLKG	BLOCKING
BM	BEAM
BO	BOTTOM OF
BOT	BOTTOM
BRG	BEARING
BRK	BRICK
BRKT	BRACKET
BSMNT	BASEMENT
C	CHANNEL
CAB	CABINET
CAT	CATEGORY
CB	CATCH BASIN
CB	CEMENT BOARD
CBU	CEMENTITIOUS BACKER UNIT
CC	CENTER TO CENTER
CCTV	CLOSED CIRCUIT TELEVISION
CEM	CEMENT
CER	CERAMIC
CG	CORNER GUARD
CH	CHILLER
CI	CAST IRON
CIP	CAST-IN-PLACE
CJ	CONTROL JOINT
CL	CENTERLINE
CLG	CEILING
CLR	CLEAR
CMU	CONCRETE MASONRY UNIT
CNTR	COUNTER
CO	CLEANOUT
COL	COLUMN
CONC	CONCRETE
COND	CONDITION
CONN	CONNECTION
CONST	CONSTRUCTION
CONT	CONTINUOUS
CONTR	CONTRACTOR
COORD	COORDINATE
CORR	CORRIDOR
CPT	CARPET
CT	CERAMIC TILE
CTR	CENTER
CTSK	COUNTERSUNK
CW	COLD WATER
D	DEEP, DEPTH
DBL	DOUBLE
DEG	DEGREE
DEMO	DEMOLISH OR DEMOLITION
DEMO	DEMOLITION
DEPT	DEPARTMENT
DF	DRINKING FOUNTAIN
DIA	DIAMETER
DIFF	DIFFUSER
DIM	DIMENSION
DIMS	DIMENSIONS
DISP	DISPENSER
DIV	DIVISION
DMPF	DAMP PROOFING
DN	DOWN
DO	DOOR OPENING
DR	DOOR
DRN	DRAIN
DS	DOWNSPOUT
DS	DOWN SPOUT
DTL	DETAIL
DW	DISHWASHER
DWG	DRAWING
DWR	DRAWER
CMU	CONCRETE MASONRY UNIT
E	EAST
EA	EACH
EB	EXPANSION BOLT
EC	ELECTRICAL CONTRACT(OR)
EJ	EXPANSION JOINT
EL	ELEVATION
ELEC	ELECTRICAL
ELEV	ELEVATOR
EMER	EMERGENCY
ENCL	ENCLOSURE
ENG	ENGINEER
EP	ELECTRICAL PANEL
EPDM	ETHYLENE PROPYLENE DIENE M-CLASS
EQ	EQUAL
EQUIP	EQUIPMENT
EWC	ELECTRIC WATER COOLER
EXH	EXHAUST
EXIST	EXISTING
EXP	EXPANSION
EXT	EXTERIOR
FA	FIRE ALARM
FB	FACE BRICK
FD	FLOOR DRAIN
FD	FLOOR DRAIN OR FIRE DEPARTMENT
FDC	FIRE DEPARTMENT CONNECTION
FE	FIRE EXTINGUISHER
FEC	FIRE EXTINGUISHER CABINET
FF&E	FURNITURE, FIXTURES AND EQUIPMENT
FFB	FLUSH FLOOR BOX
FFEL	FINISH FLOOR ELEVATION
FH	FLAT HEAD
FHC	FIRE HOSE CABINET
FIN	FINISH
FIXT	FIXTURE
FLASH	FLASHING
FLR	FLOOR
FLUOR	FLUORESCENT
FND	FOUNDATION
FO	FACE OF
FP	FIRE PROTECTION
FPG	FIREPROOFING
FR	FIRE RESISTANT
FRC	FIBER REINFORCED CONCRETE
FRP	FIBER REINFORCED PLASTIC
FRT	FIRE RETARDANT TREATED
FT	FEET/FOOT
FTG	FOOTING
FURN	FURNITURE
FURR	FURRING
FWC	FABRIC WALL COVERING
FWP	FABRIC WRAPPED PANEL
GA	GAUGE
GALV	GALVANIZED
GB	GRAB BAR
GC	GENERAL CONTRACT(OR)
GEN	GENERAL
GFRC	GLASS FIBER REINFORCED CONCRETE
GFRG	GLASS FIBER REINFORCED GYPSUM
GL	GLASS
GLAZ	GLAZING
GRAN	GRANULAR
GRD	GROUND
GSM	GALVANIZED SHEET METAL
GV	GAS VALVE
GWB	GYPSUM WALL BOARD
GYP	GYPSUM
H	HIGH/HEIGHT
HB	HOSE BIB
HB	HOSE BIBB
HC	HANDICAPPED
HDWD	HARDWOOD
HDWR	HARDWARE
HGT	HEIGHT
HM	HOLLOW METAL
HNDRL	HANDRAIL
HO	HOLD OPEN
HORIZ	HORIZONTAL
HR	HOUR
HRC	HOSE REEL CABINET
HTG	HEATING
HVAC	HEATING VENTILATION AND AIR CONDITIONING
HW	HOT WATER
ID	INSIDE DIAMETER
IN	INCH/INCHES
INCAND	INCANDESCENT
INCL	INCLUDED/INCLUDING
INFO	INFORMATION
INSUL	INSULATION
INSUL	INSULATED OR INSULATION
INT	INTERIOR
INTERM	INTERMEDIATE
INV	INVERT
JAN	JANITOR
JC	JANITOR'S CLOSET
JST	JOIST
JT	JOINT
KIT	KITCHEN
KO	KNOCK OUT
LAM	LAMINATE
LAV	LAVATORY
LB	POUNDS
LLH	LONG LEG HORIZONTAL
LLV	LONG LEG VERTICAL
LT	LIGHT
MAS	MASONRY
MAX	MAXIMUM
MECH	MECHANICAL
MED	MEDIUM
MEMBR	MEMBRANE
MFR	MANUFACTURER
MH	MAN HOLE
MIN	MINIMUM
MISC	MISCELLANEOUS
MO	MASONRY OPENING
MR	MOISTURE RESISTANT
MTD	MOUNTED
MTG	MOUNTING
MTL	METAL
MULL	MULLION
N	NORTH
NA	NOT APPLICABLE
NC	NOISE CRITERIA
NIC	NOT IN CONTRACT
NO	NUMBER
NOM	NOMINAL
NON COMB	NON COMBUSTIBLE
NTS	NOT TO SCALE
OA	OUTSIDE AIR
OC	ON CENTER
OD	OUTSIDE DIAMETER
OD	OVERFLOW DRAIN
OFCI	OWNER FURNISHED, CONTRACTOR INSTALLED
OFF	OFFICE
OFOI	OWNER FURNISHED, OWNER INSTALLED
OH	OVERHEAD
OPNG	OPENING
OPP	OPPOSITE
ORD	OVERFLOW ROOF DRAIN
P	PAINT
PAV	PAVING
PBD	PARTICLE BOARD
PC	PRECAST OR PLUMNG CONTRACT(OR)
PDF	POWER DRIVEN FASTENER
PERF	PERFORATED
PERIM	PERIMETER
PERP	PERPENDICULAR
PL	PLATE
PLAM	PLASTIC LAMINATE
PLAS	PLASTER
PLBG	PLUMBING
PLF	POUNDS PER LINEAR FOOT
PLYWD	PLYWOOD
PNL	PANEL
PNT	PAINT OR PAINTED
POL	POLISHED
PR	PAIR
PREFAB	PREFABRICATED
PROJ	PROJECT
PSF	POUNDS PER SQUARE FOOT
PT	POINT
PT	PRESSURE TREATED
PTD	PAINTED
PTN	PARTITION
PVC	POLYVINYL CHLORIDE
QT	QUARRY TILE
QTY	QUANTITY
R	RADIUS/RISER
RA	RETURN AIR
RAD	RADIUS
RB	RESILIENT BASE
RBR	RUBBER
RCP	REFLECTED CEILING PLAN
RD	ROOF DRAIN
REC	RECESSED
RECOM	RECOMMENDED
RECPT	RECEPTACLE
REF	REFERENCE
REFR	REFRIGERATOR
REG	REGISTER
REINF	REINFORCED REINFORCING
REINF	REINFORCED
REL	RELOCATE
REM	REMOVABLE
REQ	REQUIRE/REQUIRED
REQD	REQUIRED
RESIL	RESILIENT
REV	REVISION/REVISED
RM	ROOM
RO	ROUGH OPENING
RTD	RATED
RTG	RATING
RWL	RAIN WATER LEADER
S	SOUTH
SA	SUPPLY AIR
SAF	SELF ADHERED FLASHING
SC	SOLID CORE
SCHED	SCHEDULE
SD	STORM DRAIN
SECT	SECTION
SF	SQUARE FEET/FOOT
SH	SPRINKLER HEAD
SHR	SHOWER
SHT	SHEET
SIM	SIMILAR
SM	SHEET METAL
SM	SURFACE MOUNTED
SP	STANDPIPE
SPEC	SPECIFICATION
SPEC	SPECIFIED OR SPECIFICATION
SPK	SPRINKLER OR SPEAKER
SPKR	SPEAKER
SQ	SQUARE
SS	STAINLESS STEEL
SSK	SERVICE SINK
STA	STATION
STC	SOUND TRANSMISSION COEFFICIENT
STL	STEEL
STOR	STORAGE
STRG	STRINGER
STRUCT	STRUCTURAL
STRUCT	STRUCTURE OR STRUCTURAL
SUBCAT	SUBCATEGORY
SUSP	SUSPENDED
SYM	SYMMETRICAL
SYS	SYSTEM
T	TREAD
T&B	TOP AND BOTTOM
T&G	TONGUE AND GROOVE
TB	TOWEL BAR
TEL	TELEPHONE/TELECOM
TELE	TELEPHONE
TEMP	TEMPERATURE
TEMP	TEMPORARY
THK	THICKNESS
THRU	THROUGH
TKBD	TACK BOARD
TLT	TOILET
TMPD	TEMPERED
TO	TOP OF
TOB	TOP OF BEAM
TOC	TOP OF CONCRETE
TOS	TOP OF STEEL
TS	TUBE STEEL
TV	TELEVISION
TYP	TYPICAL
UNFIN	UNFINISHED
UNO	UNLESS NOTED OTHERWISE
UON	UNLESS OTHERWISE NOTED
URNL	URINAL
VAC	VENTILATION AND AIR CONDITIONING
VAR	VARIES
VCT	VINYL COMPOSITION TILE
VERT	VERTICAL
VEST	VESTIBULE
VIF	VERIFY IN FIELD
VP	VISION PANEL
VR	VAPOR RETARDER
VT	VINYL TILE
VWC	VINYL WALL COVERING
W	WIDE/WEST
W	WITH
W/O	WITHOUT
WC	WATER CLOSET
WD	WOOD
WIN	WINDOW
WM	WIRE MESH
WP	WATERPROOF/WATERPROOFING
WPM	WATERPROOF MEMBRANE
WS	WEATHER-STRIPPING
WSCT	WAINSCOT
WT	WEIGHT
WV	WATER VALVE
WWF	WELDED WIRE FABRIC
WWM	WELDED WIRE MESH

RENOVATIONS

J.P. MCCASKEY STADIUM PROJECTS

SCHOOL DISTRICT OF LANCASTER

SITE LOCATION



COVER

A0.1 CODE ANALYSIS & NOTES
A0.2 CODE ANALYSIS & NOTES
A0.3 CODE ANALYSIS & NOTES
A0.4 LIFE SAFETY PLANS - BLEACHERS
A0.5 LIFE SAFETY FLOOR PLANS
A0.6 ADA / UL DETAILS
A0.7 PHASING PLANS

CIVIL

01 COVER
02 PLAN NOTES
03 NPDES NOTES
04 NPDES NOTES
05 NPDES NOTES
06 O&M NOTES
07 OVERALL & EXISTING CONDITIONS PLAN
08 EXIST. CONDITIONS & DEMOLITION PLAN
09 EXIST. CONDITIONS & DEMOLITION PLAN
10 EASEMENT PLAN
11 LAYOUT PLAN
12 LAYOUT PLAN
13 GRADING PLAN
14 GRADING PLAN
15 SUBGRADE PLAN
16 SUBGRADE PLAN
17 ESC PLAN
18 ESC PLAN
19 PCSM PLAN
20 PCSM PLAN
21 STORMWATER PLAN & PROFILE
22 UTILITY PLAN
23 UTILITY PLAN & PROFILE
24 TREE PROTECTION PLAN
25 TREE PROTECTION PLAN
26 LANDSCAPE PLAN
27 LANDSCAPE PLAN
28 SITE DETAILS
29 SITE DETAILS
30 SITE DETAILS
31 SITE DETAILS
32 SITE DETAILS
33 SITE DETAILS
34 SITE DETAILS
35 SITE DETAILS
36 SITE DETAILS
37 SITE DETAILS
38 SITE DETAILS
39 ESC DETAILS
40 ESC DETAILS
41 ESC DETAILS
42 STORMWATER DETAILS
43 STORMWATER DETAILS
44 STORMWATER DETAILS
45 UTILITY DETAILS
46 UTILITY DETAILS
47 FIELD LIGHTING
48 FIELD LIGHTING
49 SITE LIGHTING
50 SITE LIGHTING
51 PRE-DEVELOPMENT WATERSHED MAP
52 POST-DEVELOPMENT WATERSHED MAP

ARCHITECTURAL

AD1.1 BLEACHER DEMOLITION PLANS
AD1.2 FIRST FLOOR DEMOLITION PLANS
AD1.3 SECOND FLOOR DEMOLITION PLAN
A1.1 BLEACHER PLANS
A1.2 FIRST FLOOR PLANS
A1.3 SECOND FLOOR PLAN
A2.1 VISITOR EXTERIOR ELEVATIONS
A2.2 HOME EXTERIOR ELEVATIONS
A3.1 BUILDING SECTIONS
A3.2 BUILDING SECTIONS
A6.1 FIRST FLOOR REFLECTED CEILING PLANS
A6.2 SECOND FLOOR REFLECTED CEILING PLAN
A7.1 VERTICAL CIRCULATION
A7.2 VERTICAL CIRCULATION
A8.1 ENLARGED PLANS & INTERIOR ELEVATIONS
A8.2 ENLARGED PLANS & INTERIOR ELEVATIONS
A8.3 ENLARGED PLANS & INTERIOR ELEVATIONS
A8.4 ENLARGED PLANS & INTERIOR ELEVATIONS
A8.5 ENLARGED PLANS & INTERIOR ELEVATIONS
A8.6 ENLARGED PLANS & INTERIOR ELEVATIONS
A8.7 ENLARGED PLANS & INTERIOR ELEVATIONS
A8.8 ENLARGED PLANS & INTERIOR ELEVATIONS
A8.9 ENLARGED PLAN & ACCESSIBILITY DETAILS
A8.10 INTERIOR ELEVATIONS
A8.11 ENLARGED PLANS & INTERIOR ELEVATIONS
A9.1 DOOR & WINDOW SCHEDULES & TYPES
A10.1 FINISH SCHEDULE
A10.2 FIRST FLOOR FINISH PLANS
A11.1 CONCESSION STAND FLOOR PLANS

STRUCTURAL

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S0.1 GENERAL STRUCTURAL NOTES & SCHEDULES
S0.2 SCHEDULE OF SPECIAL INSPECTIONS
S1.0 FOUNDATION PLAN
S1.1 FRAMING PLAN
S1.2 CONCRETE RESTORATION WORK - VISITOR BLEACHER
S1.3 CONCRETE RESTORATION WORK - HOME BLEACHER
S2.0 SECTION DETAILS
S2.1 SECTION DETAILS
S2.2 SECTION DETAILS
S2.3 SECTION DETAILS
S3.0 TYPICAL DETAILS
S3.1 TYPICAL DETAILS

BLEACHER / PRESSBOX

C1.1 COVER SHEET
A0.1. FOUNDATION PLAN
A0.2. FOUNDATION DETAILS
A1.1. EXISTING SEATING PLANS HOME & VISITOR
A1.2. NEW SEATING PLANS HOME & VISITOR
A2.1. SECTION @ EXISTING HOME SEATING
A2.2. SECTION @ NEW HOME SEATING
A2.3. SECTION @ NEW HOME MID AISLE RAILS
A2.4. SECTION @ EXISTING VISITORS SEATING
A2.5. SECTION @ NEW VISITORS SEATING
A2.6. SECTION @ NEW VISITORS MID AISLE RAILS
A3.1. ELEVATIONS @ NEW FRONT WALKWAY HOME & VISITOR
A4.1. 113" ELEV. X 8'-0" CLEAR STAIR FRAMING & HANDRAIL PLANS
A4.2. STAIR SECTIONS & DETAILS
A5.1. 38" ELEV. X 5'-0" CLEAR RAMP FRAMING & HANDRAIL PLANS
A5.2. RAMP ELEVATIONS
A5.3. 113" ELEV. X 5'-0" CLEAR RAMP FRAMING PLAN
A5.4. 113" ELEV. X 5'-0" CLEAR RAMP HANDRAIL PLAN
A5.5. RAMP ELEVATIONS
A6.1. PLANK CONFIGURATIONS
A6.2. FRONT WALKWAY SECTIONS
A6.3. ALUMINIUM LEGEND & DETAILS
A6.4. ENLARGED HANDICAP DETAILS
A7.1. FENCE, GUARDRAILS & FITTING DETAILS
1 NOTES, CROSS SECTION
2 FLOOR, ELECTRICAL PLAN
3 ELEVATIONS

MECHANICAL

H0.1 HVAC SYMBOLS
H1.1 FIRST FLOOR PLANS - HVAC DEMOLITION
H2.1 FIRST FLOOR PLANS - HVAC
H2.2 SECOND FLOOR PLAN - HVAC
H2.3 BLEACHER PLANS - HVAC
H3.1 FIRST FLOOR PLANS - HW PIPING
H3.2 SECOND FLOOR PLAN - HW PIPING
H4.1 HVAC SCHEDULES
H4.2 HVAC DETAILS
H4.3 HVAC SECTIONS
H5.1 CONCESSION STAND PLANS - HVAC

PLUMBING

P0.1 PLUMBING SCHEDULES AND NOTES
P1.1 FIRST FLOOR PLANS - PLUMBING DEMOLITION
P1.2 SECOND FLOOR PLAN - PLUMBING DEMOLITION
P2.1 FIRST FLOOR PLANS - PLUMBING
P2.2 SECOND FLOOR PLAN - PLUMBING
P2.3 HIGH SCHOOL FIRST FLOOR PLUMBING PLAN
P3.1 ENLARGED PLUMBING PLANS
P3.2 ENLARGED PLUMBING PLANS
P3.3 ENLARGED PLUMBING PLANS
P4.1 PLUMBING DETAILS
P4.2 PLUMBING DETAILS
P5.1 CONCESSION STAND PLANS - PLUMBING

ELECTRICAL

E0.1 ELECTRICAL SYMBOLS
E1.1 SITE PLAN - ELECTRICAL DEMOLITION
E1.2 SITE PLAN - ELECTRICAL
E1.3 SITE PLAN - LIGHTING
E1.4 SITE PLAN - ATHLETIC LIGHTING
E2.1 FIRST FLOOR PLANS - ELECTRICAL DEMOLITION
E2.2 SECOND FLOOR PLAN - ELECTRICAL DEMOLITION
E2.3 BLEACHER PLANS - ELECTRICALDEMOLITION
E3.1 FIRST FLOOR PLANS - LIGHTING
E3.2 SECOND FLOOR PLAN - LIGHTING
E3.3 BLEACHER PLANS - LIGHTING
E4.1 FIRST FLOOR PLANS - POWER
E4.2 SECOND FLOOR PLANS - POWER
E4.3 BLEACHER PLANS - POWER
E5.1 FIRST FLOOR PLANS - SYSTEMS
E5.2 SECOND FLOOR PLAN - SYSTEMS
E5.3 BLEACHER PLANS - SYSTEM
E6.1 CONCESSION STAND PLAN - ELECTRICAL
E7.1 POWER RISER DIAGRAM
E7.2 TELECOMMUNICATIONS RISER DIAGRAM
E8.1 ELECTRICAL DETAILS
E8.2 ELECTRICAL DETAILS

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School District of Lancaster
Together We Can!

CONSULTANT:

ISSUE DATES
DATE: DESCRIPTION:
02/01/2025 PERMIT SET
03/05/2025 CONFORMED SET

PROJ # : 24-SDL-03 DRAWN BY : SAB

SHEET TITLE:

COVER SHEET

SHEET NUMBER:

CS1

RENOVATIONS
J.P. MCCASKEY STADIUM PROJECTS
SCHOOL DISTRICT OF LANCASTER
445 N RESERVOIR ST, LANCASTER, PA 17602

CONFORMED SET

4/24/2025 12:59:42 PM

BUILDING CODE ANALYSIS:

PENNSYLVANIA UNIFORM CONSTRUCTION CODE (UCC):
INTERNATIONAL BUILDING CODE - 2018
INTERNATIONAL BUILDING CODE - 2018 CHAPTER 11
INTERNATIONAL FIRE CODE - 2018
INTERNATIONAL PLUMBING CODE - 2018
INTERNATIONAL ENERGY CONSERVATION CODE - 2018
INTERNATIONAL MECHANICAL CODE - 2018
ICC A117.1 - 2009 ACCESSIBILITY CODE

03. USE AND OCCUPANCY CLASSIFICATION

303 ASSEMBLY GROUP A
ASSEMBLY A-3 (INTERIOR SPACES)
ASSEMBLY A-5 (BLEACHERS)

311 STORAGE GROUP S
STORAGE S-2 (LOW HAZARD)

04. GENERAL BUILDING HEIGHTS AND AREAS

TABLE 504.3 & 504.4 & 506.2 ALLOWABLE BUILDING HEIGHTS AND AREAS

HOME BLEACHERS:
GROUP: A
TYPE OF CONSTRUCTION: TYPE IIB
HEIGHT LIMITATION: 2 STORIES, 55 FEET
AREA LIMITATION: 9,500 SF PER STORY

AWAY BLEACHERS:
GROUP: A
TYPE OF CONSTRUCTION: TYPE IIB
HEIGHT LIMITATION: 2 STORIES, 55 FEET
AREA LIMITATION: 9,500 SF PER STORY

ACTUAL BUILDING SIZE:

HOME BLEACHERS:

GROUP: A	
HEIGHT:	51 FEET
STORIES:	2
FIRST FLOOR SQUARE FOOTAGE:	8,760 SF
SECOND FLOOR SQUARE FOOTAGE:	3,900 SF

AWAY BLEACHERS:

GROUP: A	
HEIGHT:	33 FEET
STORIES:	1
FIRST FLOOR SQUARE FOOTAGE:	5,500 SF

TABLE 508.4 REQUIRED SEPARATION OF OCCUPANCIES
A,S2 *NS* - 1 HOUR SEPARATION REQUIRED
S - NO SEPARATION REQUIRED

05. TYPES OF CONSTRUCTION

602 CONSTRUCTION CLASSIFICATION

602.2 TYPES I AND II. TYPES I AND II CONSTRUCTION ARE THOSE TYPES OF CONSTRUCTION IN WHICH THE BUILDING ELEMENTS LISTED IN TABLE 601 ARE OF NONCOMBUSTIBLE MATERIALS, EXCEPT AS PERMITTED IN SECTION 603 AND ELSEWHERE IN THIS CODE.

TABLE 601 FIRE-RESISTANCE RATING REQUIREMENTS FOR BUILDING ELEMENTS (HOURS)

BUILDING ELEMENT	TYPE
PRIMARY STRUCTURAL FRAME	IIB
BEARING WALLS	
EXTERIOR	0
INTERIOR	0
NONBEARING WALLS AND PARTITIONS	
EXTERIOR	0
INTERIOR	0
FLOOR CONSTRUCTION AND SECONDARY MEMBERS	0
ROOF CONSTRUCTION AND SECONDARY MEMBERS	0

TABLE 602 FIRE-RESISTANCE RATING REQUIREMENTS FOR EXTERIOR WALLS BASED ON FIRE SEPARATION DISTANCE

FIRE SEPARATION DISTANCE = X (FEET)	TYPE OF CONSTRUCTION	OCCUPANCY GROUP A, B, E, F-2, I, R, S-2, U
X < 5[c]	ALL	1
5 ≤ X < 10	OTHERS	1
10 ≤ X < 30	IIB, VB,	0
X ≥ 30	**ALL**	**0**

06. FIRE AND SMOKE PROTECTION FEATURES

705 EXTERIOR WALLS

705.5 FIRE-RESISTANCE RATINGS. EXTERIOR WALLS SHALL BE FIRE-RESISTANCE RATED IN ACCORDANCE WITH TABLES 601 AND 602 AND THIS SECTION. THE REQUIRED FIRE-RESISTANCE RATING OF EXTERIOR WALLS WITH A FIRE SEPARATION DISTANCE OF GREATER THAN 10 FEET SHALL BE RATED FOR EXPOSURE TO FIRE FROM THE INSIDE. THE REQUIRED FIRE-RESISTANCE RATING OF EXTERIOR WALLS WITH A FIRE SEPARATION DISTANCE OF LESS THAN OR EQUAL TO 10 FEET SHALL BE RATED FOR EXPOSURE TO FIRE FROM BOTH SIDES.

705.8 OPENINGS. OPENINGS IN EXTERIOR WALLS SHALL COMPLY WITH SECTIONS 705.8.1 THROUGH 705.8.6.

705.8.1 ALLOWABLE AREA OF OPENINGS. THE MAXIMUM AREA OF UNPROTECTED AND PROTECTED OPENINGS PERMITTED IN AN EXTERIOR WALL IN ANY STORY OF A BUILDING SHALL NOT EXCEED THE PERCENTAGES SPECIFIED IN TABLE 705.8.

EXCEPTION: BUILDINGS WHOSE EXTERIOR BEARING WALLS, EXTERIOR NONBEARING WALLS AND EXTERIOR PRIMARY STRUCTURAL FRAME ARE NOT REQUIRED TO BE FIRE-RESISTANCE RATED SHALL BE PERMITTED TO HAVE UNLIMITED UNPROTECTED OPENINGS.

TABLE 705.8 MAXIMUM AREA OF EXTERIOR WALL OPENINGS BASED ON FIRE SEPARATION DISTANCE AND DEGREE OF OPENING PROTECTION:

FIRE SEPARATION DISTANCE	DEGREE OF OPENING PROTECTION	ALLOWABLE AREA
30 or greater		NO LIMIT

707 FIRE BARRIERS

TABLE 707.3.10 FIRE-RESISTANCE RATING REQUIREMENTS FOR FIRE BARRIERS, FIRE WALLS OR HORIZONTAL ASSEMBLIES BETWEEN FIRE AREAS

TABLE 707.3.10
FIRE-RESISTANCE RATING REQUIREMENTS FOR FIRE BARRIERS, FIRE WALLS OR HORIZONTAL ASSEMBLIES BETWEEN FIRE AREAS

OCCUPANCY GROUP	FIRE-RESISTANCE RATING (hours)
H-1, H-2	4
F-1, H-3, S-1	3
A, B, E, F-2, H-4, H-5, I, M, R, S-2	2
U	1

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TO DETERMINE THE OCCUPANT LOAD OF EACH SEX, THE TOTAL OCCUPANT LOAD SHALL BE DIVIDED IN HALF. TO DETERMINE THE REQUIRED NUMBER OF FIXTURES, THE FIXTURE RATIO OR RATIOS FOR FIXTURE TYPE SHALL BE APPLIED TO THE OCCUPANT LOAD OF EACH SEX IN ACCORDANCE WITH TABLE 403.1

HOME BLEACHER REQUIREMENTS (ASSEMBLY A-5)

CLASSIFICATION: ASSEMBLY - 2,441 / 2 = 1220 MALE, 1220 FEMALE

	Male WC	Female WC	Male Lav	Female Lav	DF	Service Sink
	1 PER 75 FIRST 1500 1 PER 120 AFTER 1500	1 PER 40 FIRST 1520 1 PER 60 AFTER 1520	1 PER 200	1 PER 150	1 PER 1000	1
REQUIRED	16	30	6	8	3	1

AWAY BLEACHER REQUIREMENTS (ASSEMBLY A-5)

CLASSIFICATION: ASSEMBLY - 1251 OCC / 2 = 625 MALE, 625 FEMALE

	Male WC	Female WC	Male Lav	Female Lav	DF	Service Sink
	1 PER 75 FIRST 1500 1 PER 120 AFTER 1500	1 PER 40 FIRST 1520 1 PER 60 AFTER 1520	1 PER 200	1 PER 150	1 PER 1000	1
REQUIRED	8	15	3	4	2	1

707.4 EXTERIOR WALLS. WHERE EXTERIOR WALLS SERVE AS A PART OF A REQUIRED FIRE-RESISTANCE-RATED SHAFT OR STAIRWAY OR RAMP ENCLOSURE, OR SEPARATION, SUCH WALLS SHALL COMPLY WITH THE REQUIREMENTS OF SECTION 705 FOR EXTERIOR WALLS AND THE FIRE-RESISTANCE-RATED ENCLOSURE OR SEPARATION REQUIREMENTS SHALL NOT APPLY.

707.5 CONTINUITY. FIRE BARRIERS SHALL EXTEND FROM THE TOP OF THE FOUNDATION OR FLOOR/CEILING ASSEMBLY BELOW TO THE UNDERSIDE OF THE FLOOR OR ROOF SHEATHING, SLAB, OR DECK ABOVE AND SHALL BE SECURELY ATTACHED THERETO. SUCH FIRE BARRIERS SHALL BE CONTINUOUS THROUGH CONCEALED SPACE, SUCH AS THE SPACE ABOVE A SUSPENDED CEILING. JOINTS AND VOIDS AT INTERSECTIONS SHALL COMPLY WITH SECTIONS 707.8 AND 707.9.

708 FIRE PARTITIONS - REFER TO TABLE 1020.1 CORRIDOR FIRE-RESISTANCE RATING

709 SMOKE BARRIERS - NOT APPLICABLE

711 HORIZONTAL ASSEMBLIES - SHALL NOT BE LESS THAN THAT REQUIRED BY THE BUILDING TYPE OF CONSTRUCTION

714 PENETRATIONS FIRE-RESISTANCE-RATED WALLS.
PENETRATIONS SHALL COMPLY WITH THE FOLLOWING:

714.4.1 THROUGH PENETRATIONS.

714.4.1.1 FIRE-RESISTANCE-RATED ASSEMBLIES. PENETRATIONS SHALL BE INSTALLED AS TESTED IN AN APPROVED FIRE-RESISTANCE-RATED ASSEMBLY.

714.4.1.2 THROUGH-PENETRATION FIRESTOP SYSTEM. THROUGH PENETRATIONS SHALL BE PROTECTED BY AN APPROVED PENETRATION FIRESTOP SYSTEM INSTALLED AS TESTED IN ACCORDANCE WITH ASTM E 814 OR UL 1479.

715 FIRE-RESISTANT JOINT SYSTEMS

715.1 GENERAL. JOINTS INSTALLED IN OR BETWEEN FIRE-RESISTANCE-RATED WALLS, FLOOR OR FLOOR/CEILING ASSEMBLIES AND ROOFS OR ROOF/CEILING ASSEMBLIES SHALL BE PROTECTED BY AN APPROVED FIRE-RESISTANCE
JOINT SYSTEM DESIGNED TO RESIST THE PASSAGE OF FIRE FOR A TIME PERIOD NOT LESS THAN THE REQUIRED FIRE-RESISTANCE RATING OF THE WALL, FLOOR OR ROOF IN OR BETWEEN WHICH IT IS INSTALLED.
FIRE-RESISTANT JOINT SYSTEMS SHALL BE TESTED IN ACCORDANCE WITH EITHER ASTM E 1966 OF UL 2079.

716 OPENING PROTECTIVES
TABLE 716.2(2) OPENING FIRE PROTECTION ASSEMBLIES, RATINGS AND MARKINGS

TABLE 716.1(2)
OPENING FIRE PROTECTION ASSEMBLIES, RATINGS AND MARKINGS

TYPE OF ASSEMBLY	REQUIRED WALL ASSEMBLY RATING (hours)	MINIMUM FIRE DOOR AND FIRE SHUTTER ASSEMBLY RATING (hours)	DOOR VISION PANEL SIZE[b]	FIRE-RATED GLAZING MARKING DOOR VISION PANEL[c, e]	MINIMUM SIDELIGHT/ TRANSOM ASSEMBLY RATING (hours)		FIRE-RATED GLAZING MARKING SIDELIGHT/TRANSOM PANEL	
					Fire protection	Fire resistance	Fire protection	Fire resistance
Fire walls and fire barriers having a required fire-resistance rating greater than 1 hour	4	3	See Note b	D-H-W-240	Not Permitted	4	Not Permitted	W-240
	3	3[a]	See Note b	D-H-W-180	Not Permitted	3	Not Permitted	W-180
	2	1 1/2	100 sq. in.	≤ 100 sq. in. = D-H-90 >100 sq. in.= D-H-W-90	Not Permitted	2	Not Permitted	W-120
	1 1/2	1 1/2	100 sq. in.	≤ 100 sq. in. = D-H-90 >100 sq. in.= D-H-W-90	Not Permitted	1 1/2	Not Permitted	W-90
Enclosures for shafts, interior exit stairways and interior exit ramps.	2	1 1/2	100 sq. in.[c]	≤ 100 sq. in. = D-H-90 > 100 sq. in.= D-H-T-W-90	Not Permitted	2	Not Permitted	W-120
Horizontal exits in fire walls[d]	4	3	100 sq. in.	≤ 100 sq. in. = D-H-180 > 100 sq. in.= D-H-W-240	Not Permitted	4	Not Permitted	W-240
	3	3[a]	100 sq. in.	≤ 100 sq. in. = D-H-180 > 100 sq. in.= D-H-W-180	Not Permitted	3	Not Permitted	W-180
Fire barriers having a required fire-resistance rating of 1 hour: Enclosures for shafts, exit access stairways, exit access ramps, interior exit stairways and interior exit ramps; and exit passageway walls	1	1	100 sq. in.	≤ 100 sq. in. = D-H-60 >100 sq. in.= D-H-T-W-60	Not Permitted	1	Not Permitted	W-60
					Fire protection			
Other fire barriers	1	3/4	Maximum size tested	D-H	3/4		D-H	
Fire partitions: Corridor walls	1	3/4[a]	Maximum size tested	D-20	3/4[a]		D-H-OH-45	
	0.5	1/3	Maximum size tested	D-20	1/3		D-H-OH-20	
Other fire partitions	1	3/4	Maximum size tested	D-H-45	3/4		D-H-45	
	0.5	1/3	Maximum size tested	D-H-20	1/3		D-H-20	
Exterior walls	3	1 1/2	100 sq. in.[a]	≤ 100 sq. in. = D-H-90 > 100 sq. in = D-H-W-90	Not Permitted	3	Not Permitted	W-180
	2	1 1/2	Maximum size tested	D-H 90 or D-H-W-90	1 1/2	2	D-H-OH-90	W-120
					Fire protection			
	1	3/4	Maximum size tested	D-H-45	3/4		D-H-45	
Smoke barriers	1	1/3	Maximum size tested	D-20	3/4		D-H-OH-45	

For SI: 1 square inch = 645.2 mm.
a. Two doors, each with a fire protection rating of 1½ hours, installed on opposite sides of the same opening in a fire wall, shall be deemed equivalent in fire protection rating to one 3-hour fire door.
b. Fire-resistance-rated glazing tested to ASTM E119 in accordance with Section 716.1.2.3 shall be permitted, in the maximum size tested.
c. Under the column heading "Fire-rated glazing marking door vision panel," W refers to the fire-resistance rating of the glazing, not the frame.
d. See Section 716.2.5.1.2.1.
e. See Section 716.1.2.2.| and Table 716.1(1) for additional permitted markings.

08. INTERIOR FINISHES

803 WALL AND CEILING FINISHES

803.1.1 - INTERIOR WALL AND CEILING FINISH MATERIALS TESTED IN ACCORDANCE WITH NFPA 286. INTERIOR WALL AND CEILING FINISH MATERIALS SHALL BE CLASSIFIED IN ACCORDANCE WITH NFPA 286 AND COMPLY WITH SECTION

803.1.2 - 803.1.2 INTERIOR WALL AND CEILING FINISH MATERIALS TESTED IN ACCORDANCE WITH ASTM E84 OR UL 723. INTERIOR WALL AND CEILING FINISH MATERIALS SHALL BE CLASSIFIED IN ACCORDANCE WITH ASTM E84 OR UL 723. SUCH INTERIOR FINISH MATERIALS SHALL BE GROUPED IN THE FOLLOWING CLASSES IN ACCORDANCE WITH THEIR FLAME SPREAD AND SMOKE-DEVELOPED INDICES.

CLASS A= FLAME SPREAD INDEX 0-25; SMOKE-DEVELOPED INDEX 0-450.
CLASS B = FLAME SPREAD INDEX 26-75; SMOKE-DEVELOPED INDEX 0-450.
CLASS C = FLAME SPREAD INDEX 76-200; SMOKE-DEVELOPED INDEX 0-450.

TABLE 803.13 - INTERIOR WALL AND CEILING FINISH REQUIREMENTS BY OCCUPANCY

OCCUPANCY	EXIT STAIRWAYS AND RAMPS	CORRIDORS	AND ENCLOSURES	ENCLOSED SPACES
A-3,A-5	A	A	A	B
S	B	B	B	C

804 INTERIOR FLOOR FINISH

804.1 GENERAL. INTERIOR FLOOR FINISH AND FLOOR COVERING MATERIALS SHALL COMPLY WITH SECTIONS 804.2 THROUGH 804.4.2.

EXCEPTION: FLOOR FINISHES AND COVERINGS OF A TRADITIONAL TYPE, SUCH AS WOOD, VINYL, LINOLEUM OR TERRAZZO, AND RESILIENT FLOOR COVERING MATERIALS THAT ARE NOT COMPRISED OF FIBERS.

804.2 CLASSIFICATION. INTERIOR FLOOR FINISH AND FLOOR COVERING MATERIALS REQUIRED BY SECTION 804.4.2 TO BE OF CLASS I OR CLASS II MATERIALS SHALL BE CLASSIFIED IN ACCORDANCE WITH NFPA 253. CLASS 1, 0.45 WATTS/CM2 OR GREATER; CLASS II, 0.22 WATTS/CM2 OR GREATER.

808 ACOUSTICAL CEILING SYSTEMS

808.1 ACOUSTICAL CEILING SYSTEMS. THE QUALITY , DESIGN, FABRICATION AND ERECTION OF METAL SUSPENSION SYSTEMS FOR ACOUSTICAL TILE AND LAY-IN PANEL CEILINGS IN BUILDINGS OR STRUCTURES SHALL CONFORM WITH GENERALLY ACCEPTED ENGINEERING PRACTICE, THE PROVISIONS OF THIS CHAPTER AND OTHER APPLICABLE REQUIREMENTS OF THIS CODE

808.1.1 MATERIALS AND INSTALLATION. ACOUSTICAL MATERIALS COMPLYING WITH THE INTERIOR FINISH REQUIREMENTS OF SECTION 803 SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS AND APPLICABLE PROVISIONS FOR APPLYING INTERIOR FINISH.

808.1.1.1 SUSPENDED ACOUSTICAL CEILINGS. SUSPENDED ACOUSTICAL CEILING SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH THE PROVISIONS OF ASTM C 635 AND ASTM C 636.

808.1.1.2 FIRE-RESISTANCE-RATED CONSTRUCTION. ACOUSTICAL CEILING SYSTEMS THAT ARE PART OF FIRE-RESISTANCE-RATED CONSTRUCTION SHALL BE INSTALLED IN THE SAME MANNER USED IN THE ASSEMBLY TESTED AND SHALL COMPLY WITH THE PROVISIONS OF CHAPTER 7.

09. FIRE PROTECTION SYSTEMS

903 AUTOMATIC SPRINKLER SYSTEM

903.2.1.3 GROUP A-3. AN AUTOMATIC SPRINKLER SYSTEM SHALL BE PROVIDED THROUGHOUT STORIES CONTAINING GROUP A-3 OCCUPANCIES AND THROUGHOUT ALL STORIES FROM THE GROUP A-3 OCCUPANCY TO AND INCLUDING THE LEVELS OF EXIT DISCHARGE SERVING THAT OCCUPANCY WHERE ONE OF THE FOLLOWING CONDITIONS EXIST:

1. THE FIRE AREA EXCEEDS 12,000 SQUARE FEET
2. THE FIRE AREA HAS AN OCCUPANT LOAD OF 300 OR MORE
3. THE FIRE AREA IS LOCATED ON A FLOOR OTHER THAN A LEVEL OF EXIT DISCHARGE. NOT APPLICABLE, NOT ENCLOSED

906 PORTABLE FIRE EXTINGUISHERS

906.1 WHERE REQUIRED. PORTABLE FIRE EXTINGUISHERS SHALL BE INSTALLED IN THE FOLLOWING LOCATIONS:

1. IN NEW AND EXISTING GROUP A, B, E, F, I, M, R-1, R-2, R-4 AND S OCCUPANCIES.
2. WITHIN 30 FEET OF COMMERCIAL COOKING EQUIPMENT.
3. IN AREAS WHERE FLAMMABLE OR COMBUSTIBLE LIQUIDS ARE STORED, USED OR DISPENSED.
4. ON EACH FLOOR OF STRUCTURES UNDER CONSTRUCTION.
5. WHERE REQUIRED BY THE INTERNATIONAL FIRE CODE SECTIONS INDICATED IN TABLE 906.1
6. SPECIAL-HAZARD AREAS, INCLUDING BUT NO LIMITED TO LABORATORIES, COMPUTER ROOMS AND GENERATOR ROOMS, WHERE REQUIRED BY THE FIRE CODE OFFICIAL.

906.2 GENERAL REQUIREMENTS. PORTABLE FIRE EXTINGUISHERS SHALL BE SELECTED, INSTALLED AND MAINTAINED IN ACCORDANCE WITH THIS SECTION AND NFPA 10.

906.3 SIZE AND DISTRIBUTION.

TABLE 906.3(1) FIRE EXTINGUISHERS FOR CLASS A FIRE HAZARDS LIGHT (LOW) HAZARD OCCUPANCY

MINIMUM RATED SINGLE EXTINGUISHER	MAXIMUM FLOOR AREA PER UNIT OF TYPE A	MAXIMUM FLOOR AREA FOR EXTINGUISHER	MAXIMUM TRAVEL DISTANCE TO EXTINGUISHER
2-A	3,000 SQUARE FEET	11,250 SQUARE FEET	75 FEET

907 FIRE ALARM AND DETECTION SYSTEMS

907.2.3 GROUP E. A MANUAL FIRE ALARM SYSTEM THAT INITIATES THE OCCUPANT NOTIFICATION SIGNAL UTILIZING AN EMERGENCY VOICE/ALARM COMMUNICATION SYSTEM MEETING THE REQUIREMENTS OF SECTION 907.5.2.2 AND INSTALLED IN ACCORDANCE WITH SECTION 907.6 SHALL BE INSTALLED IN GROUP E OCCUPANCIES. WHEN AUTOMATIC SPRINKLER SYSTEMS OR SMOKE DETECTORS ARE INSTALLED, SUCH SYSTEMS OR DETECTORS SHALL BE CONNECTED TO THE BUILDING FIRE ALARM SYSTEM.
EXCEPTION 4. MANUAL FIRE ALARM BOXES SHALL NOT BE REQUIRED IN GROUP E OCCUPANCIES WHERE THE BUILDING IS EQUIPPED THROUGHOUT WITH AN APPROVED AUTOMATIC SPRINKLER SYSTEM INSTALLED IN ACCORDANCE WITH SECTION 903.3.1.1, THE NOTIFICATION APPLIANCES WILL ACTIVATE ON SPRINKLER WATERFLOW AND MANUAL ACTIVATION IS PROVIDED FROM A NORMALLY OCCUPIED LOCATION.

10. MEANS OF EGRESS

1003 GENERAL MEANS OF EGRESS

1003.1 APPLICABILITY. THE GENERAL REQUIREMENTS SPECIFIED IN SECTIONS 1003 THROUGH 1013 SHALL APPLY TO ALL THREE ELEMENTS OF THE MEANS OF EGRESS SYSTEM, IN ADDITION TO THOSE SPECIFIC REQUIREMENTS FOR THE EXIT ACCESS, THE EXIT AND THE EXIT DISCHARGE.

1003.2 CEILING HEIGHT. THE MEANS OF EGRESS SHALL HAVE A CEILING HEIGHT OF NOT LESS THAN 7 FEET 6 INCHES.

EXCEPTIONS:
1. SLOPED CEILINGS IN ACCORDANCE WITH SECTION 1208.2.
2. [NOT APPLICABLE]
3. ALLOWABLE PROJECTIONS IN ACCORDANCE WITH SECTION 1003.3.
4. STAIR HEADROOM IN ACCORDANCE WITH SECTION 1009.2.
5. DOOR HEIGHT IN ACCORDANCE WITH SECTION 1008.1.1.
6. RAMP HEADROOM IN ACCORDANCE WITH SECTION 1010.5.2.

1003.3 PROTRUDING OBJECTS.

1003.3.1 HEADROOM. PROTRUDING OBJECTS ARE PERMITTED TO EXTEND BELOW THE MINIMUM CEILING HEIGHT REQUIRED BY SECTION 1003.2 PROVIDED A MINIMUM HEADROOM OF 80 INCHES SHALL BE PROVIDED.

1003.3.2 POST-MOUNTED OBJECTS SHALL NOT OVERHANG MORE THAN 4 INCHES BETWEEN 27 INCHES AND 80 INCHES.

1003.3.3 HORIZONTAL PROJECTIONS SHALL NOT PROJECT MORE THAN 4 INCHES BETWEEN 27 INCHES AND 80 INCHES.

1003.3.4 PROTRUDING OBJECTS SHALL NOT REDUCE THE MINIMUM CLEAR WIDTH OF ACCESSIBLE ROUTES.

1003.4 FLOOR SURFACE. WALKING SURFACES OF THE MEANS OF EGRESS SHALL HAVE A SLIP-RESISTANT SURFACE AND BE SECURELY ATTACHED.

1003.5 ELEVATION CHANGE. WHERE CHANGES IN ELEVATION OF LESS THAN 12 INCHES EXIST IN THE MEANS OF EGRESS, SLOPE SURFACES SHALL BE USED WHERE THE SLOPE IS GREATER THAN ONE UNIT VERTICAL IN 20 UNITS HORIZONTAL, RAMPS COMPLYING WITH SECTION 1012 SHALL BE USED.

1003.6 MEANS OF EGRESS CONTINUITY THE PATH OF EGRESS TRAVEL ALONG A MEANS OF EGRESS SHALL NOT BE INTERRUPTED BY ANY BUILDING ELEMENT OTHER THAN A MEANS OF EGRESS COMPONENT AS SPECIFIED IN THIS CHAPTER. OBSTRUCTIONS SHALL NOT BE PLACED IN THE REQUIRED WIDTH OF A MEANS OF EGRESS EXCEPT PROJECTIONS PERMITTED BY THIS CHAPTER. THE REQUIRED CAPACITY OF A MEANS OF EGRESS SYSTEM SHALL NOT BE DIMINISHED ALONG THE PATH OF EGRESS TRAVEL.

1004 OCCUPANT LOAD

1004.6 FIXED SEATING. FOR AREAS HAVING FIXED SEATS AND AISLES, THE OCCUPANT LOAD SHALL BE DETERMINED BY THE NUMBER OF FIXED SEATS INSTALLED THEREIN. THE OCCUPANT LOAD FOR AREAS IN WHICH FIXED SEATING IS NOT INSTALLED, SUCH AS WAITING SPACES, SHALL BE DETERMINED IN ACCORDANCE WITH SECTION 1004.5 AND ADDED TO THE NUMBER OF FIXED SEATS. THE OCCUPANT LOAD OF WHEELCHAIR SPACES AND THE ASSOCIATED-
COMPANION SEAT SHALL BE BASED ON ONE OCCUPANT FOR EACH WHEELCHAIR SPACE AND ONE OCCUPANT FOR THE ASSOCIATED COM-COMPANION SEAT PROVIDED IN ACCORDANCE WITH SECTION 1108.2.3. FOR AREAS HAVING FIXED SEATING WITHOUT DIVIDING ARMS, THE OCCUPANT LOAD SHALL BE NOT LESS THAN THE NUMBER OF SEATS BASED
ON ONE PERSON FOR EACH 18 INCHES (457 MM) OF SEATING LENGTH

TABLE 1004.5 - MAXIMUM FLOOR AREA ALLOWANCES PER OCCUPANT

FUNCTION OF SPACE	OCC. LOAD FACTOR		ALLOWABLE	DESIGN OCC.	ADA OCC.	TOTAL
ASSEMBLY (HOME BLEACHERS) A5	1 OCC / 18"	SEE PLAN	2,421	2,421	+ 20	2,441
ASSEMBLY (AWAY BLEACHERS) A5	1 OCC / 18"	SEE PLAN	1239	1239	+ 12	1,251
LOCKER ROOM (HOME) A3	50 GROSS	1164 SF	24	50		
LOCKER ROOM (VISITOR) A3	50 GROSS	877 SF	18	45		
WORKOUT ROOM (HOME) A3	50 GROSS	3,250 SF	65	65		
STORAGE / MECHANICAL	300 GROSS	4,490 SF	15	15		
						3,692 OCC

1005 EGRESS WIDTH

1005.1 MINIMUM REQUIRED EGRESS WIDTH. THE MEANS OF EGRESS WIDTH SHALL NOT BE LESS THAN REQUIRED BY THIS SECTION. THE TOTAL WIDTH OF MEANS OF EGRESS IN INCHES (MM) SHALL NOT BE LESS THAN THE TOTAL OCCUPANT LOAD SERVED BY THE MEANS OF EGRESS MULTIPLIED BY 0.3 INCHES (7.62 MM) PER OCCUPANT FOR STAIRWAYS AND BY 0.2 INCHES (5.08 MM) PER OCCUPANT FOR OTHER EGRESS COMPONENTS. THE WIDTH SHALL NOT BE LESS THAN SPECIFIED ELSEWHERE IN THIS CODE. MULTIPLE MEANS OF EGRESS SHALL BE SIZED SUCH THAT THE LOSS OF ANY ONE MEANS OF EGRESS SHALL NOT REDUCE THE AVAILABLE CAPACITY TO LESS THAN 50 PERCENT OF THE REQUIRED CAPACITY. THE MAXIMUM CAPACITY REQUIRED FROM ANY STORY OF A BUILDING SHALL BE MAINTAINED TO THE TERMINATION OF THE MEANS OF EGRESS.

1006 EXIT AND EXIT ACCESS DOORWAYS

1006.1 THE NUMBER OF EXITS OR EXIT ACCESS DOORWAYS REQUIRED WITHIN THE MEANS OF EGRESS SYSTEM SHALL COMPLY WITH THE PROVISIONS OF SECTION 1006.2 FOR SPACES, INCLUDING MEZZANINES, AND SECTION 1006.3 FOR STORIES.

1006.2.1 EGRESS BASED ON OCCUPANT LOAD AND COMMON PATH OF EGRESS TRAVEL DISTANCE. TWO EXITS OR EXIT ACCESS DOORWAYS FROM ANY SPACE SHALL BE PROVIDED WHERE THE DESIGN OCCUPANT LOAD OR THE COMMON PATH OF EGRESS TRAVEL DISTANCE EXCEEDS THE VALUES LISTED IN TABLE 1006.2.1.

TABLE 1006.2.1 SPACES WITH ONE EXIT OR EXIT ACCESS DOORWAY

OCCUPANCY	MAXIMUM OCCUPANT LOAD OF SPACE	MAXIMUM COMMON PATH OF EGRESS TRAVEL DISTANCE (FEET)			
		WITHOUT SPRINKLER SYSTEM (FEET)		WITH SPRINKLER SYSTEM (FEET)	
		OCCUPANT LOAD			
		OL ≤ 30	OL > 30		
A	49	75	75	75	75
S	29	100	75	100	100

1006.3.1 ADJACENT STORY. THE PATH OF EGRESS TRAVEL TO AN EXIT SHALL NOT PASS THROUGH MORE THAN ONE ADJACENT STORY.

EXCEPTION: THE PATH OF EGRESS TRAVEL TO AN EXIT SHALL BE PERMITTED TO PASS THROUGH MORE THAN ONE ADJACENT STORY IN ANY OF THE FOLLOWING:
5.EXIT ACCESS STAIRWAYS AND RAMPS BETWEEN THE BAL-CONY, GALLERY OR PRESS BOX AND THE MAIN ASSEMBLY FLOOR IN OCCUPANCIES SUCH AS THEATERS, PLACES OF RELIGIOUS WORSHIP, AUDITORIUMS AND SPORTS FACILITIES.

1006.3.2 EGRESS BASED ON OCCUPANT LOAD
EACH STORY AND OCCUPIED ROOF SHALL HAVE THE MINIMUM NUMBER OF EXITS, OR ACCESS TO EXISTS, AS SPECIFIED IN TABLE 1006.3.1. A SINGLE EXIT OR ACCESS TO A SINGLE EXIT SHALL BE PERMITTED IN ACCORDANCE WITH SECTION 1006.3.2. THE REQUIRED NUMBER OF EXITS, OR EXIT ACCESS STAIRWAYS OR RAMPS PROVIDING ACCESS TO EXITS, FOR ANY STORY OR OCCUPIED ROOF SHALL BE MAINTAINED UNTIL ARRIVAL AT THE EXIT DISCHARGE OR A PUBLIC WAY.

TABLE 1006.3.2
MINIMUM NUMBER OF EXISTS FOR OCCUPANT LOAD

OCCUPANT LOAD	MINIMUM NUMBER OF EXIST PER STORY
1-500	2
501-1,000	3
More than 1,000	4

1008 MEANS OF EGRESS ILLUMINATION

1008.2 ILLUMINATION REQUIRED. THE MEANS OF EGRESS, INCLUDING THE EXIT DISCHARGE, SHALL BE ILLUMINATED AT ALL TIMES THE BUILDING SPACE SERVED BY THE MEANS OF EGRESS IS OCCUPIED.

1008.3 ILLUMINATION EMERGENCY POWER. THE POWER SUPPLY FOR MEANS OF EGRESS ILLUMINATION SHALL NORMALLY BE PROVIDED BY THE PREMISES' ELECTRICAL SUPPLY. IN THE EVENT OF POWER SUPPLY FAILURE, AN EMERGENCY ELECTRICAL SYSTEM SHALL AUTOMATICALLY ILLUMINATE ALL OF THE FOLLOWING AREAS:

1. AISLES AND UNENCLOSED EGRESS STAIRWAYS IN ROOMS AND SPACES THAT REQUIRE TWO OR MORE MEANS OF EGRESS.
2. CORRIDORS, EXIT ENCLOSURES AND EXIT PASSAGEWAYS IN BUILDINGS REQUIRED TO HAVE TWO OR MORE EXITS.
3. EXTERIOR EGRESS COMPONENTS AT OTHER THAN THEIR LEVELS OF I EXIT DISCHARGE UNTIL EXIT DISCHARGE IS ACCOMPLISHED FOR BUILDINGS REQUIRED TO HAVE TWO OR MORE EXITS.
4. INTERIOR EXIT DISCHARGE ELEMENTS, AS PERMITTED IN SECTION 1028.1, IN BUILDINGS REQUIRED TO HAVE TWO OR MORE EXITS.
5. EXTERIOR LANDINGS AS REQUIRED BY SECTION 1010.1.6 FOR EXIT DISCHARGE DOORWAYS IN BUILDINGS REQUIRED TO HAVE TWO OR MORE EXITS.

THE EMERGENCY POWER SYSTEM SHALL PROVIDE POWER FOR A DURATION OF NOT LESS THAN 90 MINUTES AND SHALL CONSIST OF STORAGE BATTERIES, UNIT EQUIPMENT OR AN ON-SITE GENERATOR. THE INSTALLATION OF THE EMERGENCY POWER SYSTEM SHALL BE IN ACCORDANCE WITH CHAPTER 27.

1009 ACCESSIBLE MEANS OF EGRESS

1009.1 ACCESSIBLE MEANS OF EGRESS REQUIRED. ACCESSIBLE MEANS OF EGRESS SHALL COMPLY WITH THIS SECTION. ACCESSIBLE SPACES SHALL BE PROVIDED WITH NOT LESS THAN ONE ACCESSIBLE MEANS OF EGRESS. WHERE MORE THAN ONE MEANS OF EGRESS ARE REQUIRED BY SECTION 1006.2 OR 1006.3 FROM ANY ACCESSIBLE SPACE, EACH ACCESSIBLE PORTION OF THE SPACE SHALL BE SERVED BY NOT LESS THAN TWO ACCESSIBLE MEANS OF EGRESS.

1009.3 STAIRWAYS. IN ORDER TO BE CONSIDERED PART OF AN ACCESSIBLE

1029 ASSEMBLY

1029.1 GENERAL. A ROOM OR SPACE USED FOR ASSEMBLY PURPOSES THAT CONTAINS SEATS, TABLES, DISPLAYS, EQUIPMENT OR OTHER MATERIAL SHALL COMPLY WITH THIS SECTION.

1029.1.1 SPACES UNDER GRANDSTANDS AND BLEACHERS. SPACES UNDER GRANDSTANDS OR BLEACHERS SHALL BE SEPARATED BY FIRE BARRIERS COMPLYING WITH SECTION 707 AND HORIZONTAL ASSEMBLIES COMPLYING WITH SECTION 711 WITH NOT LESS THAN 1-HOUR FIRE-RESISTANCE-RATED CONSTRUCTION.

EXCEPTIONS:

2.TOILET ROOMS.

3.OTHER ACCESSORY USE AREAS 1,000 SQUARE FEET (92.9 M2) OR LESS IN AREA AND EQUIPPED WITH AN AUTOMATIC SPRINKLER SYSTEM IN ACCORDANCE WITH SECTION 903.3.1.1.

1029.6.2.3 AUTOMATIC SPRINKLERS. ENCLOSED AREAS WITH WALLS AND CEILINGS IN BUILDINGS OR STRUCTURES CONTAINING SMOKE-PROTECTED ASSEMBLY SEATING SHALL BE PROTECTED WITH AN APPROVED AUTOMATIC SPRINKLER SYSTEM IN ACCORDANCE WITH SECTION 903.3.1.1. NOT APPLICABLE

EXCEPTIONS:

2. PRESS BOXES AND STORAGE FACILITIES LESS THAN 1,000 SQUARE FEET (93 M2) IN AREA.
3. OUTDOOR SEATING FACILITIES WHERE SEATING AND THE MEANS OF EGRESS IN THE SEATING AREA ARE ESSENTIALLY OPEN TO THE OUTSIDE.

1029.6.3 OPEN-AIR ASSEMBLY SEATING. IN OPEN-AIR ASSEMBLY SEATING, THE REQUIRED CAPACITY IN INCHES (MM) OF AISLES SHALL BE NOT LESS THAN THE TOTAL OCCUPANT LOAD SERVED BY THE EGRESS ELEMENT MULTIPLIED BY 0.08 (2.0 MM) WHERE EGRESS IS BY STEPPED AISLE AND MULTIPLIED BY 0.06 (1.52 MM) WHERE EGRESS IS BY LEVEL AISLES AND RAMPED AISLES.

EXCEPTION:

THE REQUIRED CAPACITY IN INCHES (MM) OF AISLES SHALL BE PERMITTED TO COMPLY WITH SECTION 1029.6.2 FOR THE NUMBER OF SEATS IN THE OPEN-AIR ASSEMBLY SEATING WHERE ''' SECTION 1029.6.2 PERMITS LESS CAPACITY.

1029.7 TRAVEL DISTANCE. THE EXIT ACCESS TRAVEL DISTANCE SHALL COMPLY WITH SECTION 1017. WHERE AISLES ARE PROVIDED FOR SEATING, THE DISTANCE SHALL BE MEASURED ALONG THE AISLES AND AISLE ACCESSWAYS WITHOUT TRAVEL OVER OR ON THE SEATS.

EXCEPTIONS:

3. IN FACILITIES WITH OPEN-AIR ASSEMBLY SEATING OF TYPE I OR II CONSTRUCTION, THE TOTAL EXIT ACCESS TRAVEL DISTANCE SHALL NOT BE LIMITED.

1029.9.1 MINIMUM AISLE WIDTH. THE MINIMUM CLEAR WIDTH FOR AISLES SHALL COMPLY WITH ONE OF THE FOLLOWING:

1. FORTY-EIGHT INCHES (1219 MM) FOR STEPPED AISLES HAVING SEATING ON BOTH SIDES.

3. TWENTY-THREE INCHES (584 MM) BETWEEN A STEPPED AISLE HANDRAIL OR GUARD AND SEATING WHERE THE STEPPED AISLE IS SUBDIVIDED BY A MID-AISLE HANDRAIL.

1029.9.2 AISLE CATCHMENT AREA. THE AISLE SHALL PROVIDE SUFFICIENT CAPACITY FOR THE NUMBER OF PERSONS ACCOMMODATED BY THE CATCHMENT AREA SERVED BY THE AISLE. THE CATCHMENT AREA SERVED BY AN AISLE IS THAT PORTION OF THE TOTAL SPACE SERVED BY THAT SECTION OF THE AISLE. IN ESTABLISHING CATCHMENT AREAS, THE ASSUMPTION SHALL BE MADE THAT THERE IS A BALANCED USE OF ALL MEANS OF EGRESS, WITH THE NUMBER OF PERSONS IN PROPORTION TO EGRESS CAPACITY.

1029.9.3 CONVERGING AISLES. WHERE AISLES CONVERGE TO FORM A SINGLE PATH OF EGRESS TRAVEL, THE REQUIRED CAPACITY OF THAT PATH SHALL BE NOT LESS THAN THE COMBINED REQUIRED CAPACITY OF THE CONVERGING AISLES.

1029.9.4 UNIFORM WIDTH AND CAPACITY. THOSE PORTIONS OF AISLES, WHERE EGRESS IS POSSIBLE IN EITHER OF TWO DIRECTIONS, SHALL BE UNIFORM IN MINIMUM WIDTH OR REQUIRED CAPACITY.

1029.9.6 AISLE MEASUREMENT. THE CLEAR WIDTH FOR AISLES SHALL BE MEASURED TO WALLS, EDGES OF SEATING AND TREAD EDGES EXCEPT FOR PERMITTED PROJECTIONS.

1029.14.2 STEPPED AISLES. AISLES WITH A SLOPE EXCEEDING ONE UNIT VERTICAL IN EIGHT UNITS HORIZONTAL (12.5-PERCENT SLOPE) SHALL CONSIST OF A SERIES OF RISERS AND TREADS THAT EXTENDS ACROSS THE FULL WIDTH OF AISLES AND COMPLIES WITH SECTIONS 1029.14.2.1 THROUGH 1029.14.2.4.

1029.14.2.1 TREADS. TREAD DEPTHS SHALL BE NOT LESS THAN 11 INCHES (279 MM) AND SHALL HAVE DIMENSIONAL UNIFORMITY.

EXCEPTION: THE TOLERANCE BETWEEN ADJACENT TREADS SHALL NOT EXCEED 3/16 INCH (4.8 MM).

1029.14.2.2 RISERS. WHERE THE GRADIENT OF STEPPED AISLES IS TO BE THE SAME AS THE GRADIENT OF ADJOINING SEATING AREAS, THE RISER HEIGHT SHALL BE NOT LESS THAN 4 INCHES (102 MM) NOT MORE THAN 8 INCHES (203 MM) AND SHALL BE UNIFORM WITHIN EACH FLIGHT.

EXCEPTIONS:

1. RISER HEIGHT NONUNIFORMITY SHALL BE LIMITED TO THE EXTENT NECESSITATED BY CHANGES IN THE GRADIENT OF THE ADJOINING SEATING AREA TO MAINTAIN ADEQUATE SIGHTLINES. WHERE NONUNIFORMITIES EXCEED 3/16 INCH (4.8 MM) BETWEEN ADJACENT RISERS, THE EXACT LOCATION OF SUCH NONUNIFORMITIES SHALL BE INDICATED WITH A DISTINCTIVE MARKING STRIPE ON EACH TREAD AT THE NOSING OR LEADING EDGE ADJACENT TO THE NONUNIFORM RISERS. SUCH STRIPE SHALL BE NOT LESS THAN 1 INCH (25 MM),AND NOT MORE THAN 2 INCHES (51 MM), WIDE. THE EDGE MARKING STRIPE SHALL BE DISTINCTIVELY DIFFERENT FROM THE CONTRASTING MARKING STRIPE.

2. RISER HEIGHTS NOT EXCEEDING 9 INCHES (229 MM) SHALL BE PERMITTED WHERE THEY ARE NECESSITATED BY THE SLOPE OF THE ADJACENT SEATING AREAS TO MAINTAIN SIGHTLINES.

1029.14.2.2.1 CONSTRUCTION TOLERANCES. THE TOLERANCE BETWEEN ADJACENT RISERS ON A STEPPED AISLE THAT WERE DESIGNED TO BE EQUAL HEIGHT SHALL NOT EXCEED 3/16 INCH (4.8 MM). WHERE THE STEPPED AISLE IS DESIGNED IN ACCORDANCE WITH EXCEPTION 1 OF SECTION 1029.14.2.2, THE STEPPED AISLE SHALL BE CONSTRUCTED SO THAT EACH RISER OF UNEQUAL HEIGHT, DETERMINED IN THE DIRECTION OF DESCENT, IS NOT MORE THAN 3/8 INCH (9.5 MM) IN HEIGHT DIFFERENT FROM ADJACENT RISERS WHERE STEPPED AISLE TREADS ARE LESS THAN 22 INCHES (560 MM) IN DEPTH AND 3/4 INCH (19.1 MM) IN HEIGHT DIFFERENT FROM ADJACENT RISERS WHERE STEPPED AISLE TREADS ARE 22 INCHES (560 MM) OR GREATER IN DEPTH.

1029.16 HANDRAILS. RAMPED AISLES HAVING A SLOPE EXCEEDING ONE UNIT VERTICAL IN 15 UNITS HORIZONTAL (6.7-PERCENT SLOPE) AND STEPPED AISLES SHALL BE PROVIDED WITH HANDRAILS IN COMPLIANCE WITH SECTION 1014 LOCATED EITHER AT ONE OR BOTH SIDES OF THE AISLE OR WITHIN THE AISLE WIDTH.

EXCEPTIONS:

3. HANDRAIL EXTENSIONS ARE NOT REQUIRED AT THE TOP AND BOTTOM OF STEPPED AISLES AND RAMPED AISLES TO PERMIT CROSSOVERS WITHIN THE AISLES.

1029.16.1 DISCONTINUOUS HANDRAILS. WHERE THERE IS SEATING ON BOTH SIDES OF THE AISLE, THE MID-AISLE HANDRAILS SHALL BE DISCONTINUOUS WITH GAPS OR BREAKS AT INTERVALS NOT EXCEEDING FIVE ROWS TO FACILITATE ACCESS TO SEATING AND TO PERMIT CROSSING FROM ONE SIDE OF THE AISLE TO THE OTHER. THESE GAPS OR BREAKS SHALL HAVE A CLEAR WIDTH OF NOT LESS THAN 22 INCHES (559 MM) AND NOT GREATER THAN 36 INCHES (914 MM), MEASURED HORIZONTALLY, AND THE MID-AISLE HAND-RAIL SHALL HAVE ROUNDED TERMINATIONS OR BENDS.

1029.16.3 MID-AISLE TERMINATION. MID-AISLE HANDRAILS SHALL NOT EXTEND BEYOND THE LOWEST RISER AND SHALL TERMINATE WITHIN 18 INCHES (381 MM), MEASURED HORIZONTALLY, FROM THE LOWEST RISER. HANDRAIL EXTENSIONS ARE NOT REQUIRED.

1029.16.4 RAILS. WHERE MID-AISLE HANDRAILS ARE PROVIDED IN STEPPED AISLES, THERE SHALL BE AN ADDITIONAL RAIL LOCATED APPROXIMATELY 12 INCHES (305 MM) BELOW THE HANDRAIL. THE RAIL SHALL BE ADEQUATE IN STRENGTH AND ATTACHMENT IN ACCORDANCE WITH SECTION 1607.8.1.2.

11 ACCESSIBILITY

1104.3.2 PRESS BOXES. PRESS BOXES IN A BUILDING, ROOM OR SPACE USED FOR ASSEMBLY PURPOSES SHALL BE ON AN ACCESSIBLE ROUTE.

EXCEPTIONS:

1. AN ACCESSIBLE ROUTE SHALL NOT BE REQUIRED TO PRESS BOXES IN BLEACHERS THAT HAVE A SINGLE POINT OF ENTRY FROM THE BLEACHERS, PROVIDED THAT THE AGGREGATE AREA OF ALL PRESS BOXES FOR EACH PLAYING FIELD IS NOT MORE THAN 500 SQUARE FEET (46 M2).

2.AN ACCESSIBLE ROUTE SHALL NOT BE REQUIRED TO FREE–STANDING PRESS BOXES THAT ARE MORE THAN 12 FEET (3660 MM) ABOVE GRADE PROVIDED THAT THE AGGREGATE AREA OF ALL PRESS BOXES FOR EACH PLAYING FIELD IS NOT MORE THAN 500 SQUARE FEET (46M2).

SECTION 1108 SPECIAL OCCUPANCIES

1108.2.2 WHEELCHAIR SPACES. IN ROOMS AND SPACES USED FOR ASSEMBLY PURPOSES WITH FIXED SEATING, ACCESSIBLE WHEELCHAIR SPACES SHALL BE PROVIDED IN ACCORDANCE WITH SECTIONS 1108.2.2.1 THROUGH 1108.2.2.3.

1108.2.2.1 GENERAL SEATING. WHEELCHAIR SPACES SHALL BE PROVIDED IN ACCORDANCE WITH TABLE 1108.2.2.1.

TABLE 1108.2.2.1
ACCESSIBLE WHEELCHAIR SPACES

CAPACITY OF SEATING IN ASSEMBLY AREAS	MINIMUM REQUIRED NUMBER OF WHEELCHAIR SPACES
4 to 25	1
26 to 50	2
51 to 100	4
101 to 300	5
301 to 500	6
501 to 5,000	6, plus 1 for each 150, or fraction thereof, between 501 through 5,000
5,001 and over	36 plus 1 for each 200, or fraction thereof, over 5,000

1108.2.3 COMPANION SEATS. AT LEAST ONE COMPANION SEAT SHALL BE PROVIDED FOR EACH WHEELCHAIR SPACE REQUIRED BY SECTIONS 1108.2.2.1 THROUGH 1108.2.2.3.

IEBC 2018 - LEVEL 3 ALTERATIONS, WORK AREA 100%

CHAPTER 3

SECTION 301 GENERAL

301.1 GENERAL. THE REPAIR, ALTERATION, CHANGE OF OCCUPANCY, ADDITION OR RELOCATION OF ALL EXISTING BUILDINGS SHALL COMPLY WITH SECTION 301.2, 301.3, OR 301.4.

301.2 REPAIRS. REPAIRS SHALL COMPLY WITH THE REQUIREMENTS OF CHAPTER 4.

301.3.2 WORK AREA COMPLIANCE METHOD. ALTERATIONS, ADDITIONS AND CHANGES OF OCCUPANCY COMPLYING WITH THE APPLICABLE REQUIREMENTS OF CHAPTERS 6 THROUGH 12 OF THIS CODE SHALL BE CONSIDERED IN COMPLIANCE WITH THE PROVISIONS OF THIS CODE.

301.5 COMPLIANCE WITH ACCESSIBILITY. ACCESSIBILITY REQUIREMENTS FOR EXISTING BUILDINGS SHALL COMPLY WITH THE 2009 EDITION OF ICC A117.1.

SECTION 302 GENERAL PROVISIONS

302.1 APPLICABILITY. THE PROVISIONS OF SECTION 302 APPLY TO ALL ALTERATIONS, REPAIRS, ADDITIONS, RELOCATIONS OF STRUCTURES AND CHANGES OF OCCUPANCY REGARDLESS OF COMPLIANCE METHOD.

302.2 DANGEROUS CONDITIONS. THE CODE OFFICIAL SHALL HAVE THE AUTHORITY TO REQUIRE THE ELIMINATION OF CONDITIONS DEEMED DANGEROUS.

302.3 ADDITIONAL CODES. ALTERATIONS, REPAIRS, AND ADDITIONS SHALL COMPLY WITH THE PROVISIONS FOR ALTERATIONS, REPAIRS, AND ADDITIONS RESPECTIVELY, IN THIS CODE AND THE INTERNATIONAL ENERGY CONSERVATION CODE, INTERNATIONAL FIRE CODE, INTERNATIONAL FUEL GAS CODE, INTERNATIONAL MECHANICAL CODE, INTERNATIONAL PLUMBING CODE, INTERNATIONAL PRIVATE SEWAGE DISPOSAL CODE, INTERNATIONAL PROPERTY MAINTENANCE CODE, INTERNATIONAL RESIDENTIAL CODE AND NFPA 70. WHERE PROVISIONS OF THE OTHER CODES CONFLICT WITH PROVISIONS OF THIS CODE, THE PROVISIONS OF THIS CODE SHALL TAKE PRECEDENCE.

302.4 EXISTING MATERIALS. MATERIALS ALREADY IN USE IN A BUILDING IN COMPLIANCE WITH REQUIREMENTS OR APPROVALS IN EFFECT AT THE TIME OF THEIR ERECTION OR INSTALLATION SHALL BE PERMITTED TO REMAIN IN USE UNLESS DETERMINED BY THE BUILDING OFFICIAL TO BE UNSAFE.

302.5 NEW AND REPLACEMENT MATERIALS. EXCEPT AS OTHERWISE REQUIRED OR PERMITTED BY THIS CODE, MATERIALS PERMITTED BY THE APPLICABLE CODE FOR NEW CONSTRUCTION SHALL BE USED.

302.5.1 NEW STRUCTURAL MEMBERS AND CONNECTIONS. NEW STRUCTURAL MEMBERS AND CONNECTIONS SHALL COMPLY WITH THE DETAILING PROVISIONS OF THE INTERNATIONAL BUILDING CODE FOR NEW BUILDINGS OF SIMILAR STRUCTURE, PURPOSE AND LOCATION.

EXCEPTION: WHERE ALTERNATIVE DESIGN CRITERIA ARE SPECIFICALLY PERMITTED.
302.6 OCCUPANCY AND USE. WHERE DETERMINING THE APPROPRIATE APPLICATION OF THE REFERENCED SECTIONS OF THIS CODE, THE OCCUPANCY AND USE OF A BUILDING SHALL BE DETERMINED IN ACCORDANCE WITH CHAPTER 3 OF THE INTERNATIONAL BUILDING CODE.

SECTION 303 STRUCTURAL DESIGN LOADS AND EVALUATION AND DESIGN PROCEDURES

303.1 LIVE LOADS. WHERE AN ADDITION OR ALTERATION DOES NOT RESULT IN INCREASED DESIGN LIVE LOAD, EXISTING GRAVITY LOAD-CARRYING STRUCTURAL ELEMENTS SHALL BE PERMITTED TO BE EVALUATED AND DESIGNED FOR LIVE LOADS APPROVED PRIOR TO THE ADDITION OR ALTERATION. IF THE APPROVED LIVE LOAD IS LESS THAN THAT REQUIRED BY SECTION 1607 OF THE INTERNATIONAL BUILDING CODE, THE AREA DESIGNATED FOR THE NONCONFORMING LIVE LOAD SHALL BE POSTED WITH PLACARDS OF APPROVED DESIGN INDICATING THE APPROVED LIVE LOAD. WHERE THE ADDITION OR ALTERATION RESULTS IN INCREASED DESIGN LIVE LOAD, THE LIVE LOAD REQUIRED BY SECTION 1607 OF THE INTERNATIONAL BUILDING CODE SHALL BE USED.

SECTION 305 ACCESSIBILITY FOR EXISTING BUILDINGS

305.1 SCOPE. THE PROVISIONS OF SECTIONS 305.1 THROUGH 305.8 APPLY TO MAINTENANCE, CHANGE OF OCCUPANCY, ADDITIONS AND ALTERATIONS TO EXISTING BUILDINGS, INCLUDING THOSE IDENTIFIED AS HISTORIC BUILDINGS.

305.3 EXTENT OF APPLICATION. AN ALTERATION OF AN EXISTING FACILITY SHALL NOT IMPOSE A REQUIREMENT FOR GREATER ACCESSIBILITY THAN THAT WHICH WOULD BE REQUIRED FOR NEW CONSTRUCTION. ALTERATIONS SHALL NOT REDUCE OR HAVE THE EFFECT OF REDUCING ACCESSIBILITY OF A FACILITY OR PORTION OF A FACILITY.

305.6 ALTERATIONS. A FACILITY THAT IS ALTERED SHALL COMPLY WITH THE APPLICABLE PROVISIONS IN CHAPTER 11 OF THE INTERNATIONAL BUILDING CODE, UNLESS TECHNICALLY INFEASIBLE. WHERE COMPLIANCE WITH THIS SECTION IS TECHNICALLY INFEASIBLE, THE ALTERATION SHALL PROVIDE ACCESS TO THE MAXIMUM EXTENT TECHNICALLY FEASIBLE.

EXCEPTIONS:

1. THE ALTERED ELEMENT OR SPACE IS NOT REQUIRED TO BE ON AN ACCESSIBLE ROUTE, UNLESS REQUIRED BY SECTION 305.7.
2. ACCESSIBLE MEANS OF EGRESS REQUIRED BY CHAPTER 10 OF THE INTERNATIONAL BUILDING CODE ARE NOT REQUIRED TO BE PROVIDED IN EXISTING FACILITIES.

CHAPTER 6

SECTION 601 GENERAL

601.1 SCOPE THE PROVISIONS OF THIS CHAPTER SHALL BE USED IN CONJUNCTION WITH CHAPTERS 7 THROUGH 12 AND SHALL APPLY TO THE ALTERATION, ADDITION AND CHANGE OF OCCUPANCY OF EXISTING STRUCTURES, INCLUDING HISTORIC AND MOVED STRUCTURES, AS REFERENCED IN SECTION 301.3.2. THE WORK PERFORMED ON AN EXISTING BUILDING SHALL BE CLASSIFIED IN ACCORDANCE WITH THIS CHAPTER.

601.1.1 COMPLIANCE WITH OTHER ALTERNATIVES ALTERATIONS, ADDITIONS AND CHANGES OF OCCUPANCY TO EXISTING STRUCTURES SHALL COMPLY WITH THE PROVISIONS OF CHAPTERS 7 THROUGH 12 OR WITH ONE OF THE ALTERNATIVES PROVIDED IN SECTION 301.3.

601.2 WORK AREA DIAGRAM THE WORK AREA, AS DEFINED IN CHAPTER 2, SHALL BE IDENTIFIED ON THE CONSTRUCTION DOCUMENTS.

SECTION 604 ALTERATION – LEVEL 3

604.1 SCOPE. LEVEL 3 ALTERATIONS APPLY WHERE THE WORK AREA EXCEEDS 50 PERCENT OF THE BUILDING AREA.

604.2 APPLICATION. LEVEL 3 ALTERATIONS SHALL COMPLY WITH THE PROVISIONS OF CHAPTERS 7 AND 8 FOR LEVEL 1 AND 2 ALTERATIONS, RESPECTIVELY, AS WELL AS THE PROVISIONS OF CHAPTER 9.

CHAPTER 7

SECTION 701 GENERAL

701.1 SCOPE. LEVEL 1 ALTERATIONS AS DESCRIBED IN SECTION 602 SHALL COMPLY WITH THE REQUIREMENTS OF THIS CHAPTER. LEVEL 1 ALTERATIONS TO HISTORIC BUILDINGS SHALL COMPLY WITH THIS CHAPTER, EXCEPT AS MODIFIED IN CHAPTER 12.

701.2 CONFORMANCE AN EXISTING BUILDING OR PORTION THEREOF SHALL NOT BE ALTERED SUCH THAT THE BUILDING BECOMES LESS SAFE THAN ITS EXISTING CONDITION.

SECTION 701 BUILDING ELEMENTS AND MATERIALS

702.1 INTERIOR FINISHES. NEWLY INSTALLED INTERIOR WALL AND CEILING FINISHES SHALL COMPLY WITH CHAPTER 8 OF THE INTERNATIONAL BUILDING CODE.

702.2 INTERIOR FLOOR FINISH. NEW INTERIOR FLOOR FINISH, INCLUDING NEW CARPETING USED AS AN INTERIOR FLOOR FINISH MATERIAL, SHALL COMPLY WITH SECTION 804 OF THE INTERNATIONAL BUILDING CODE.

702.3 INTERIOR TRIM. NEWLY INSTALLED INTERIOR TRIM MATERIALS SHALL COMPLY WITH SECTION 806 OF THE INTERNATIONAL BUILDING CODE.

702.6 MATERIALS AND METHODS. NEW WORK SHALL COMPLY WITH THE MATERIALS AND METHODS REQUIREMENTS IN THE INTERNATIONAL BUILDING CODE, INTERNATIONAL ENERGY CONSERVATION CODE, INTERNATIONAL MECHANICAL CODE, AND INTERNATIONAL PLUMBING CODE, AS APPLICABLE, THAT SPECIFY MATERIAL STANDARDS, DETAIL OF INSTALLATION AND CONNECTION, JOINTS, PENETRATIONS, AND CONTINUITY OF ANY ELEMENT, COMPONENT, OR SYSTEM IN THE BUILDING.

CHAPTER 8

SECTION 801 GENERAL

801.1 SCOPE. LEVEL 2 ALTERATIONS AS DESCRIBED IN SECTION 603 SHALL COMPLY WITH THE REQUIREMENTS OF THIS CHAPTER.

SECTION 802 BUILDING ELEMENTS AND MATERIALS

802.4 INTERIOR FINISH. THE INTERIOR FINISH OF WALLS AND CEILINGS IN EXITS AND CORRIDORS IN ANY WORK AREA SHALL COMPLY WITH THE REQUIREMENTS OF THE INTERNATIONAL BUILDING CODE.

SECTION 803 FIRE PROTECTION

803.2 AUTOMATIC SPRINKLER SYSTEMS. AUTOMATIC SPRINKLER SYSTEMS SHALL BE PROVIDED IN ACCORDANCE WITH THE REQUIREMENTS OF SECTIONS 803.2.1 THROUGH 803.2.4. INSTALLATION REQUIREMENTS SHALL BE IN ACCORDANCE WITH THE INTERNATIONAL BUILDING CODE.

803.2.2 GROUPS A, B, E, F-1, H, I, M, R-1, R-2, R4, S-1 AND S-2. IN BUILDINGS WITH OCCUPANCIES IN GROUPS A [AND] S-2, WORK AREAS THAT HAVE EXITS OR CORRIDORS SERVING AN OCCUPANT LOAD GREATER THAN 30 SHALL BE PROVIDED WITH AUTOMATIC SPRINKLER PROTECTION WHERE BOTH OF THE FOLLOWING CONDITIONS OCCUR:

1. THE WORK AREA IS REQUIRED TO BE PROVIDED WITH AUTOMATIC SPRINKLER PROTECTION IN ACCORDANCE WITH THE INTERNATIONAL BUILDING CODE AS APPLICABLE TO NEW CONSTRUCTION. NOT APPLICABLE. IBC 903.2.1.3.1 APPLIES TO FIRE AREAS LOCATED ON A FLOOR OTHER THAN THE LEVEL OF EXIT DISCHARGE. ALL EXITS OR CORRIDORS WITH AN OCCUPANT LOAD GREATER THAN 30 ARE ON THE LEVEL OF DISCHARGE.

2. THE WORK AREA EXCEEDS 50 PERCENT OF THE FLOOR AREA.
IEBC 903.2.1.3 GROUP A-3. *AN AUTOMATIC SPRINKLER SYSTEM SHALL BE PROVIDED THROUGHOUT STORIES CONTAINING GROUP A-3 OCCUPANCIES AND THROUGHOUT ALL STORIES FROM THE GROUP A-3 OCCUPANCY TO AND INCLUDING THE LEVELS OF EXIT DISCHARGE SERVING THAT OCCUPANCY WHERE ONE OF THE FOLLOWING CONDITIONS EXISTS:*

1.THE FIRE AREA EXCEEDS 12,000 SQUARE FEET. NOT APPLICABLE

2.THE FIRE AREA HAS AN OCCUPANT LOAD OF 300 OR MORE. NOT APPLICABLE

3.THE FIRE AREA IS LOCATED ON A FLOOR OTHER THAN A LEVEL OF EXIT DISCHARGE SERVING SUCH OCCUPANCIES.

SECTION 805 MEANS OF EGRESS

805.1 SCOPE. THE REQUIREMENTS OF THIS SECTION SHALL BE LIMITED TO WORK AREAS THAT INCLUDE EXITS WITHIN THE WORK AREA IN WHICH LEVEL 2 ALTERATIONS ARE BEING PERFORMED, AND WHERE SPECIFIED THEY SHALL APPLY THROUGHOUT THE FLOOR ON WHICH THE WORK AREAS ARE LOCATED OR OTHERWISE BEYOND THE WORK AREA.

805.2 GENERAL. THE MEANS OF EGRESS SHALL COMPLY WITH THE REQUIREMENTS OF THIS SECTION.

EXCEPTIONS:
1. WHERE THE WORK AREA AND THE MEANS OF EGRESS SERVING IT COMPLIES WITH NFPA 101.

2. MEANS OF EGRESS COMPLYING WITH THE REQUIREMENTS OF THE BUILDING CODE UNDER WHICH THE BUILDING WAS CONSTRUCTED SHALL BE CONSIDERED TO BE COMPLIANT MEANS OF EGRESS IF, IN THE OPINION OF THE CODE OFFICIAL, THEY DO NOT CONSTITUTE A DISTINCT HAZARD TO LIFE.

805.3 NUMBER OF EXITS. THE NUMBER OF EXITS SHALL BE IN ACCORDANCE WITH SECTIONS 805.3.1 THROUGH 805.3.3.

805.3.1 MINIMUM NUMBER. EVERY STORY UTILIZED FOR HUMAN OCCUPANCY ON WHICH THERE IS A WORK AREA THAT INCLUDES EXITS OR CORRIDORS SHARED BY MORE THAN ONE TENANT WITHIN THE WORK AREA SHALL BE PROVIDED WITH THE MINIMUM NUMBER OF EXITS BASED ON THE OCCUPANCY AND THE OCCUPANT LOAD IN ACCORDANCE WITH THE INTERNATIONAL BUILDING CODE. IN ADDITION, THE EXITS SHALL COMPLY WITH SECTIONS 805.3.1.1 AND 805.3.1.2.

805.4 EGRESS DOORWAYS. EGRESS DOORWAYS IN ANY WORK AREA SHALL COMPLY WITH SECTIONS 805.4.1 THROUGH 805.4.5.

805.4.1 TWO EGRESS DOORWAYS REQUIRED. WORK AREAS SHALL BE PROVIDED WITH TWO EGRESS DOORWAYS IN ACCORDANCE WITH THE REQUIREMENTS OF SECTIONS 805.4.1.1 AND 805.4.1.2.

805.4.1.1 OCCUPANT LOAD AND TRAVEL DISTANCE. IN ANY WORK AREA, ALL ROOMS AND SPACES HAVING AN OCCUPANT LOAD GREATER THAN 50 OR IN WHICH THE TRAVEL DISTANCE TO AN EXIT EXCEEDS 75 FEET SHALL HAVE NOT FEWER THAN TWO EGRESS DOORWAYS.

EXCEPTIONS:
1. STORAGE ROOMS HAVING A MAXIMUM OCCUPANT LOAD OF 10.

2. WHERE THE WORK AREA IS SERVED BY A SINGLE EXIT IN ACCORDANCE WITH SECTION 805.3.1.1.

805.4.2 DOOR SWING. IN THE WORK AREA AND IN THE EGRESS PATH FROM ANY WORK AREA TO THE EXIT DISCHARGE, ALL EGRESS DOORS SERVING AN OCCUPANT LOAD GREATER THAN 50 SHALL SWING IN THE DIRECTION OF EXIT TRAVEL.

805.4.2.1 SUPPLEMENTAL REQUIREMENTS FOR DOOR SWING. WHERE THE WORK AREA EXCEEDS 50 PERCENT OF THE FLOOR AREA, DOOR SWING SHALL COMPLY WITH SECTION 805.4.2 THROUGHOUT THE FLOOR.

805.4.3 DOOR CLOSING. IN ANY WORK AREA, ALL DOORS OPENING ONTO AN EXIT PASSAGEWAY AT GRADE OR AN EXIT STAIRWAY SHALL BE SELF-CLOSING OR AUTOMATIC CLOSING BY LISTED CLOSING DEVICES.

805.4.3.1 SUPPLEMENTAL REQUIREMENTS FOR DOOR CLOSING. WHERE THE WORK AREA EXCEEDS 50 PERCENT OF THE FLOOR AREA, DOORS SHALL COMPLY WITH SECTION 805.4.3 THROUGHOUT THE EXIT STAIRWAY FROM THE WORK AREA TO, AND INCLUDING, THE LEVEL OF EXIT DISCHARGE.

805.4.4 PANIC HARDWARE. IN ANY WORK AREA, AND IN THE EGRESS PATH FROM ANY WORK AREA TO THE EXIT DISCHARGE, IN BUILDINGS OR PORTIONS THEREOF OF GROUP A ASSEMBLY OCCUPANCIES WITH AN OCCUPANT LOAD GREATER THAN 100, ALL REQUIRED EXIT DOORS EQUIPPED WITH LATCHING DEVICES SHALL BE EQUIPPED WITH APPROVED PANIC HARDWARE.

805.4.4.1 SUPPLEMENTAL REQUIREMENTS FOR PANIC HARDWARE. WHERE THE WORK AREA EXCEEDS 50 PERCENT OF THE FLOOR AREA, PANIC HARDWARE SHALL COMPLY WITH SECTION 805.4.4 THROUGHOUT THE FLOOR.

805.5 OPENINGS IN CORRIDOR WALLS. OPENINGS IN CORRIDOR WALLS IN ANY WORK AREA SHALL COMPLY WITH SECTIONS 805.5.1 THROUGH 805.5.4.

EXCEPTION: OPENINGS IN CORRIDORS WHERE SUCH CORRIDORS ARE NOT REQUIRED TO BE RATED IN ACCORDANCE WITH THE INTERNATIONAL BUILDING CODE.

805.5.1 CORRIDOR DOORS. CORRIDOR DOORS IN THE WORK AREA SHALL NOT BE CONSTRUCTED OF HOLLOW CORE WOOD AND SHALL NOT CONTAIN LOUVERS.

805.5.3 OTHER CORRIDOR OPENINGS. IN ANY WORK AREA, ANY OTHER SASH, GRILLE, OR OPENING IN A CORRIDOR AND ANY WINDOW IN A CORRIDOR NOT OPENING TO THE OUTSIDE AIR SHALL BE SEALED WITH MATERIALS CONSISTENT WITH THE CORRIDOR CONSTRUCTION.

805.5.3.1 SUPPLEMENTAL REQUIREMENTS FOR OTHER CORRIDOR OPENING. WHERE THE WORK AREA EXCEEDS 50 PER-CENT OF THE FLOOR AREA, SECTION 805.5.3 SHALL BE APPLICABLE TO ALL CORRIDOR WINDOWS, GRILLS, SASHES, AND OTHER OPENINGS ON THE FLOOR.

805.5.4 SUPPLEMENTAL REQUIREMENTS FOR CORRIDOR OPENINGS. WHERE THE WORK AREA ON ANY FLOOR EXCEEDS 50 PERCENT OF THE FLOOR AREA, THE REQUIREMENTS OF SECTIONS 805.5.1 THROUGH 805.5.3 SHALL APPLY THROUGHOUT THE FLOOR.

805.6 DEAD-END CORRIDORS. DEAD-END CORRIDORS IN ANY WORK AREA SHALL NOT EXCEED 35 FEET.

805.7 MEANS-OF-EGRESS LIGHTING. MEANS-OF-EGRESS LIGHTING SHALL BE IN ACCORDANCE WITH THIS SECTION, AS APPLICABLE.

805.7.1 ARTIFICIAL LIGHTING REQUIRED. MEANS OF EGRESS IN ALL WORK AREAS SHALL BE PROVIDED WITH ARTIFICIAL LIGHTING IN ACCORDANCE WITH THE REQUIREMENTS OF THE INTERNATIONAL BUILDING CODE.

805.7.2 SUPPLEMENTAL REQUIREMENTS FOR MEANS-OF-EGRESS LIGHTING. WHERE THE WORK AREA ON ANY FLOOR EXCEEDS 50 PERCENT OF THAT FLOOR AREA, MEANS OF EGRESS THROUGHOUT THE FLOOR SHALL COMPLY WITH SECTION 805.7.1.

805.8 EXIT SIGNS. EXIT SIGNS SHALL BE IN ACCORDANCE WITH THIS SECTION, AS APPLICABLE.

805.8.1 WORK AREAS. MEANS OF EGRESS IN ALL WORK AREAS SHALL BE PROVIDED WITH EXIT SIGNS IN ACCORDANCE WITH THE REQUIREMENTS OF THE INTERNATIONAL BUILDING CODE.

805.8.2 SUPPLEMENTAL REQUIREMENTS FOR EXIT SIGNS. WHERE THE WORK AREA ON ANY FLOOR EXCEEDS 50 PERCENT OF THAT FLOOR AREA, MEANS OF EGRESS THROUGHOUT THE FLOOR SHALL COMPLY WITH SECTION 805.8.1.

805.9 HANDRAILS. THE REQUIREMENTS OF SECTIONS 805.9.1 AND 805.9.2 SHALL APPLY TO HANDRAILS FROM THE WORK AREA FLOOR TO, AND INCLUDING, THE LEVEL OF EXIT DISCHARGE.

805.9.1 MINIMUM REQUIREMENT. EVERY REQUIRED EXIT STAIRWAY THAT IS PART OF THE MEANS OF EGRESS FOR ANY WORK AREA AND THAT HAS THREE OR MORE RISERS AND IS NOT PROVIDED WITH NOT FEWER THAN ONE HANDRAIL, OR IN WHICH THE EXISTING HANDRAILS ARE JUDGED TO BE IN DANGER OF COLLAPSING, SHALL BE PROVIDED WITH HANDRAILS FOR THE FULL LENGTH OF THE STAIRWAY ON NOT FEWER THAN ONE SIDE. EXIT STAIRWAYS WITH A REQUIRED EGRESS WIDTH OF MORE THAN 66 INCHES SHALL HAVE HANDRAILS ON BOTH SIDES.

805.9.2 DESIGN. HANDRAILS REQUIRED IN ACCORDAN

SECTION 907 ENERGY CONSERVATION

907.1 MINIMUM REQUIREMENTS. LEVEL 3 ALTERATIONS TO EXISTING BUILDINGS OR STRUCTURES ARE PERMITTED WITHOUT REQUIRING THE ENTIRE BUILDING OR STRUCTURE TO COMPLY WITH THE ENERGY REQUIREMENTS OF THE INTERNATIONAL ENERGY CONSERVATION CODE. THE ALTERATIONS SHALL CONFORM TO THE ENERGY REQUIREMENTS OF THE INTERNATIONAL ENERGY CONSERVATION CODE AS THEY RELATE TO NEW CONSTRUCTION ONLY.

CHAPTER 11

SECTION 1101 GENERAL

1101.2 CREATION OR EXTENSION OF NONCONFORMITY. AN ADDITION SHALL NOT CREATE OR EXTEND ANY NONCONFORMITY IN THE EXISTING BUILDING TO WHICH THE ADDITION IS BEING MADE WITH REGARD TO ACCESSIBILITY, STRUCTURAL STRENGTH, FIRE SAFETY, MEANS OF EGRESS, OR THE CAPACITY OF MECHANICAL, PLUMBING, OR ELECTRICAL SYSTEMS.

1101.3 OTHER WORK. ANY REPAIR OR ALTERATION WORK WITHIN AN EXISTING BUILDING TO WHICH AN ADDITION IS BEING MADE SHALL COMPLY WITH THE APPLICABLE REQUIREMENTS FOR THE WORK AS CLASSIFIED IN CHAPTER 6.

SECTION 1102 HEIGHTS AND AREAS

1102.1 HEIGHT LIMITATIONS. AN ADDITION SHALL NOT INCREASE THE HEIGHT OF AN EXISTING BUILDING BEYOND THAT PERMITTED UNDER THE APPLICABLE PROVISIONS OF CHAPTER 5 OF THE INTERNATIONAL BUILDING CODE FOR NEW BUILDINGS.

1102.2 AREA LIMITATIONS. AN ADDITION SHALL NOT INCREASE THE AREA OF AN EXISTING BUILDING BEYOND THAT PERMITTED UNDER THE APPLICABLE PROVISIONS OF CHAPTER 5 OF THE INTERNATIONAL BUILDING CODE FOR NEW BUILDINGS UNLESS FIRE SEPARATION AS REQUIRED BY THE INTERNATIONAL BUILDING CODE IS PROVIDED.

1102.3 FIRE PROTECTION SYSTEMS. EXISTING FIRE AREAS INCREASED BY THE ADDITION SHALL COMPLY WITH CHAPTER 9 OF THE INTERNATIONAL BUILDING CODE.

SECTION 1103 STRUCTURAL

1103.1 ADDITIONAL GRAVITY LOADS. ANY EXISTING GRAVITY LOAD-CARRYING STRUCTURAL ELEMENT FOR WHICH AN ADDITION AND ITS RELATED ALTERATIONS CAUSE AN INCREASE IN DESIGN DEAD, LIVE OR SNOW LOAD, INCLUDING SNOW DRIFT EFFECTS, OF MORE THAN 5 PERCENT SHALL BE REPLACED OR ALTERED AS NEEDED TO CARRY THE GRAVITY LOADS REQUIRED BY THE INTERNATIONAL BUILDING CODE FOR NEW STRUCTURES. ANY EXISTING GRAVITY LOAD-CARRYING STRUCTURAL ELEMENT WHOSE GRAVITY LOAD-CARRYING CAPACITY IS DECREASED AS PART OF THE ADDITION AND ITS RELATED ALTERATIONS SHALL BE CONSIDERED TO BE AN ALTERED ELEMENT SUBJECT TO THE REQUIREMENTS OF SECTION 806.2. ANY EXISTING ELEMENT THAT WILL FORM PART OF THE LATERAL LOAD PATH FOR ANY PART OF THE ADDITION SHALL BE CONSIDERED TO BE AN EXISTING LATERAL LOAD-CARRYING STRUCTURAL ELEMENT SUBJECT TO THE REQUIREMENTS OF SECTION 1103.2.

1103.2 LATERAL FORCE-RESISTING SYSTEM. WHERE THE ADDITION IS STRUCTURALLY INDEPENDENT OF THE EXISTING STRUCTURE, EXISTING LATERAL LOAD-CARRYING STRUCTURAL ELEMENTS SHALL BE PERMITTED TO REMAIN UNALTERED. WHERE THE ADDITION IS NOT STRUCTURALLY INDEPENDENT OF THE EXISTING STRUCTURE, THE EXISTING STRUCTURE AND ITS ADDITION ACTING TOGETHER AS A SINGLE STRUCTURE SHALL MEET THE REQUIREMENTS OF SECTIONS 1609 AND 1613 OF THE INTERNATIONAL BUILDING CODE USING FULL SEISMIC FORCES.

EXCEPTIONS:

2. ANY EXISTING LATERAL LOAD-CARRYING STRUCTURAL ELEMENT WHOSE DEMAND-CAPACITY RATIO WITH THE ADDITION CONSIDERED IS NOT MORE THAN 10 PERCENT GREATER THAN ITS DEMAND-CAPACITY RATIO WITH THE ADDITION IGNORED SHALL BE PERMITTED TO REMAIN UNALTERED. FOR PURPOSES OF CALCULATING DEMAND-CAPACITY RATIOS, THE DEMAND SHALL CONSIDER APPLICABLE LOAD COMBINATIONS WITH DESIGN LATERAL LOADS OR FORCES IN ACCORDANCE WITH SECTIONS 1609 AND 1613 OF THE INTERNATIONAL BUILDING CODE. FOR PURPOSES OF THIS EXCEPTION, COMPARISONS OF DEMAND-CAPACITY RATIOS AND CALCULATION OF DESIGN LATERAL LOADS, FORCES AND CAPACITIES SHALL ACCOUNT FOR THE CUMULATIVE EFFECTS OF ADDITIONS AND ALTERATIONS SINCE ORIGINAL CONSTRUCTION.

SECTION 1107 ENERGY CONSERVATION

1107.1 MINIMUM REQUIREMENTS. ADDITIONS TO EXISTING BUILDINGS SHALL CONFORM TO THE ENERGY REQUIREMENTS OF THE INTERNATIONAL ENERGY CONSERVATION CODE AS THEY RELATE TO NEW CONSTRUCTION.

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CHAPTER 3

SECTION 301 GENERAL

301.1 GENERAL. THE CONSTRUCTION OR INSTALLATION OF NEW BLEACHERS, FOLDING AND TELESCOPIC SEATING, AND GRANDSTANDS AND PRESS BOXES SHALL COMPLY WITH THE PROVISIONS OF THIS CHAPTER.

SECTION 302 PERMITTED MATERIALS

302.1 COMBUSTIBILITY AND FLAME SPREAD. BLEACHERS, FOLDING AND TELESCOPIC SEATING, AND GRANDSTANDS SHALL BE PERMITTED TO BE CONSTRUCTED OF COMBUSTIBLE OR NONCOMBUSTIBLE MATERIALS. SUCH INSTALLATIONS WITHIN A BUILDING SHALL NOT BE CONSIDERED INTERIOR FINISH RELATIVE TO THE APPLICATION OF THE BUILDING CODE.

302.2 DURABILITY. MATERIALS USED IN THE CONSTRUCTION OF OUTDOOR INSTALLATIONS SHALL BE WEATHER RESISTANT. WHERE WOOD IS USED, IT SHALL BE NATURALLY DURABLE OR PRESERVATIVE-TREATED WOOD AS DEFINED IN THE BUILDING CODE OR OTHER APPROVED MATERIAL. WHERE FERROUS METAL IS USED, IT SHALL BE PROTECTED FROM CORROSION. FASTENERS SHALL CONSIST OF ALUMINUM OR OTHER APPROVED CORROSION-RESISTANT MATERIALS OR SHALL BE PROVIDED WITH APPROVED CORROSION-RESISTANT COATINGS SUCH AS COPPER OR ZINC.

SECTION 303 STRUCTURAL DESIGN

303.1 DESIGN. THE STRUCTURAL DESIGN SHALL BE IN ACCORDANCE WITH THE BUILDING CODE.

303.2 LOADS BLEACHERS, FOLDING AND TELESCOPIC SEATING, AND GRANDSTANDS SHALL BE DESIGNED FOR A UNIFORM LIVE LOAD OF 100 POUNDS PER SQUARE FOOT (PSF). PRESS BOXES SHALL BE DESIGNED FOR A UNIFORM LIVE LOAD OF 50 PSF. THE COMPONENTS OF THE INSTALLATION SHALL BE DESIGNED TO SUPPORT THE LOADS LISTED IN TABLE 303.2.

303.3 OTHER LOADS. BLEACHERS, FOLDING AND TELESCOPIC SEATING AND GRANDSTANDS, AND PRESS BOXES AND PLATFORMS ATTACHED TO SUCH INSTALLATIONS, SUBJECT TO WIND, SNOW, SEISMIC AND OTHER LOADS, SHALL BE DESIGNED IN ACCORDANCE WITH THE BUILDING CODE..

303.5 LOAD COMBINATIONS. IN ADDITION TO THE LOAD COMBINATIONS REQUIRED TO BE CONSIDERED FOR DESIGN IN ACCORDANCE WITH THE BUILDING CODE, THE ADDITIONAL LOAD COMBINATIONS IN SECTION 303.5.1 OR IN SECTION

303.6 DEFLECTIONS. LIVE LOAD DEFLECTION OF STRUCTURAL MEMBERS SHALL BE LIMITED TO 1/180 OF THE SPAN. EXCEPTION: DEFLECTION OF MEMBERS IN FOLDING AND TELESCOPIC SEATING SHALL NOT BE LIMITED.

303.7 FOUNDATIONS. A FOUNDATION, DESIGNED TO SUPPORT ALL LOADS, SHALL BE PROVIDED AS REQUIRED BY THE BUILDING CODE.

SECTION 305 SPACES BENEATH SEATS

305.1 SPACES BENEATH SEATS SPACES BENEATH OR ADJACENT TO SEATING STRUCTURES SHALL COMPLY WITH THE BUILDING CODE AND FIRE CODE.

SECTION 306 CLEAR HEIGHT

306.1 CLEAR HEIGHT. THE CLEAR HEIGHT OF AISLE ACCESSWAYS, AISLES AND PORTIONS OF THE MEANS OF EGRESS SYSTEM SHALL BE A MINIMUM OF 80 INCHES.

308.1 ELECTRICAL. THE ELECTRICAL SYSTEM SHALL COMPLY WITH THE ELECTRICAL CODE.
SECTION 309 FIRE PROTECTION

309.1 FIRE PROTECTION FIRE PROTECTION SYSTEMS SHALL BE PROVIDED WHERE REQUIRED BY THE BUILDING CODE.

EXCEPTIONS:

1. AN EMERGENCY VOICE/ALARM SYSTEM IS NOT REQUIRED FOR OUTDOOR BLEACHER-TYPE SEATING PROVIDED ALL OF THE FOLLOWING ARE MET:

1.1 THE BLEACHER-TYPE SEATING HAS AN OCCUPANT LOAD OF LESS THAN 15,000;

1.2 A PUBLIC ADDRESS SYSTEM WITH STANDBY POWER IS PROVIDED;

1.3 ENCLOSED SPACES ATTACHED OR IMMEDIATELY ADJACENT TO THE BLEACHER-TYPE SEATING COMPRISE, IN THE AGGREGATE, 10 PERCENT OR LESS OF THE OVERALL AREA OF THE BLEACHER-TYPE SEATING OR 1,000 SQUARE FEET, WHICHEVER IS LESS.

1.4 SPACES UNDER THE BLEACHER-TYPE SEATING SHALL BE SEPARATED FROM THE BLEACHER-TYPE SEATING IN ACCORDANCE WITH SECTION 1029.1.1.1 OF THE INTERNATIONAL BUILDING CODE.

1.5 ALL MEANS OF EGRESS FROM THE BLEACHER-TYPE SEATING ARE OPEN TO THE OUTSIDE.

2. AN EMERGENCY VOICE/ALARM SYSTEM IS NOT REQUIRED FOR OUTDOOR BLEACHER-TYPE SEATING WITH AN OCCUPANT LOAD OF 300 OR LESS.

3. AN EMERGENCY VOICE/ALARM SYSTEM IS NOT REQUIRED FOR TEMPORARY OUTDOOR BLEACHER-TYPE SEATING PROVIDING ALL OF THE FOLLOWING ARE MET:

3.1 THERE ARE NO ENCLOSED SPACES UNDER OR ATTACHED TO THE BLEACHER-TYPE SEATING;

3.2 THE BLEACHER-TYPE SEATING IS ERECTED FOR A PERIOD OF LESS THAN 180 DAYS;

3.3 EVACUATION OF THE BLEACHER-TYPE SEATING IS INCLUDED IN AN APPROVED FIRE SAFETY PLAN.

SECTION 310 ACCESSIBILITY

310.1 ACCESSIBILITY. TIERED SEATING SHALL BE ACCESSIBLE AS REQUIRED BY THE BUILDING CODE.

CHAPTER 4

SECTION 401 GENERAL

401.1 GENERAL. THE MEANS OF EGRESS FOR NEW BLEACHERS, FOLDING AND TELESCOPIC SEATING, AND GRANDSTANDS SHALL COMPLY WITH THIS CHAPTER.
SECTION 401 TRAVEL

402.1 EXIT ACCESS. TRAVEL WITHIN TIERED SEATING SHALL BE CONSIDERED EXIT ACCESS. EXIT ACCESS INCLUDES AISLES, CROSS-AISLES, SLOPED OR LEVEL WALKING SURFACES, VOMITORIES, TUNNELS, STAIRS AND RAMPS CONNECTING THE TIERED SEATING STRUCTURE TO OTHER PORTIONS OF A BUILDING, STRUCTURE OR GRADE.
SECTION 403 OCCUPANT LOAD

403.1 OCCUPANT LOAD. WHERE BENCH SEATING IS USED, THE NUMBER OF PERSONS SHALL BE BASED ON ONE PERSON FOR EACH 18 INCHES OF LENGTH OF THE BENCH. WHERE INDIVIDUAL SEATS ARE PROVIDED, THE OCCUPANT LOAD SHALL BE BASED ON ONE PERSON PER SEAT. THE OCCUPANT LOAD OF REVIEWING STANDS AND PRESS BOXES SHALL BE BASED ON 5 SQUARE FEET PER PERSON FOR STANDING SPACE AND 7 SQUARE FEET PER PERSON FOR MOVABLE CHAIR SEATING SPACE. THE OCCUPANT LOAD FOR SECURITY, AUDIO AND CAMERA PLATFORMS SHALL BE BASED ON THE ACTUAL NUMBER OF OCCUPANTS.

SECTION 404 GENERAL MEANS OF EGRESS

404.1 MINIMUM NUMBER OF EXITS. THE MINIMUM NUMBER OF EXITS SHALL BE PROVIDED FROM THE SEATING AREA BASED ON THE OCCUPANT LOADS IN TABLE 404.1 AND IN ACCORDANCE WITH THE CALCULATED WIDTH REQUIREMENT FOR EGRESS CAPACITY IN SECTION 404.5. ACCESSIBLE MEANS OF EGRESS SHALL BE PROVIDED AS REQUIRED BY SECTION 1009 OF THE INTERNATIONAL BUILDING CODE.

EXCEPTION: FOR OPEN-AIR ASSEMBLY SEATING INSTALLATIONS WHERE THE MEANS OF EGRESS CONVERGE, A MINIMUM OF TWO EGRESS PATHS SHALL BE PROVIDED, SIZED TO ACCOMMODATE THE OCCUPANT LOAD SERVED. TWO EXITS ARE PROVIDED.

404.3 EXTERIOR INSTALLATIONS. FOR EXTERIOR INSTALLATIONS, THE EXIT DISCHARGE SHALL PROVIDE A DIRECT AND UNOBSTRUCTED ACCESS TO A PUBLIC WAY.

404.5 REQUIRED WIDTH. THE CLEAR WIDTH OF AISLES AND OTHER MEANS OF EGRESS FOR OPEN-AIR ASSEMBLY SEATING SHALL NOT BE LESS THAN THE OCCUPANT LOAD SERVED BY THE EGRESS ELEMENTS MULTIPLIED BY THE APPROPRIATE FACTOR IN TABLE 404.5(3). THE TOTAL NUMBER OF SEATS SPECIFIED SHALL BE THOSE WITHIN THE SPACE EXPOSED TO THE SAME ENVIRONMENT. AISLES SHALL ALSO COMPLY WITH SECTION 405. WHERE THE WIDTH OF THE STAIR AND STEPPED AISLE EXCEEDS 30 INCHES FROM A HANDRAIL, THE CAPACITY OF THE STAIR AND STEPPED AISLE SHALL BE DETERMINED BY ADDING THE CAPACITY OF THE AISLE WITHIN 30 INCHES OF THE HANDRAIL AND THE CAPACITY OF THE STAIR OR STEPPED AISLE BEYOND 30 INCHES OF THE HANDRAIL.

404.5.1 MEASUREMENT. THE CLEAR WIDTH OF AISLES AND OTHER MEANS OF EGRESS SHALL BE MEASURED TO WALLS, EDGES OF SEATING AND TREAD EDGES EXCEPT FOR PERMITTED PROJECTIONS. THERE SHALL BE NO OBSTRUCTIONS IN THE REQUIRED WIDTH OF AISLES EXCEPT FOR HANDRAILS AS PROVIDED IN SECTION 409.7.

404.6 CLEAR HEIGHT. CLEAR HEIGHT SHALL COMPLY WITH SECTION 306.1.

SECTION 405 AISLES

405.1 AISLES. THE MINIMUM WIDTH OF AISLES SHALL BE IN ACCORDANCE WITH SECTION 404.5, BUT NOT LESS THAN THAT REQUIRED BY THIS SECTION.

TABLE 404.5(3) WIDTH OF AISLES AND MEANS OF EGRESS FOR OPEN-AIR ASSEMBLY SEATING

TOTAL NUMBER OF SEATS IN THE OPEN-AIR ASSEMBLY OCCUPANCY	INCHES OF CLEAR WIDTH PER SEAT SERVED			
	Stairs and stepped aisles with handrails within 30 inches	Stairs and stepped aisles without handrails within 30 inches	Passageways, doorways and ramps not steeper than in 1:10 slope	Ramps steeper than in 1:10 slope
Equal to or less than 15,000	0.080	0.080	0.060	0.066
20,000	0.076	0.095	0.056	0.062
Equal to or greater than 25,000	0.060	0.075	0.044	0.048

405.2 MINIMUM AISLE WIDTH. THE MINIMUM CLEAR WIDTH OF AISLES SHALL BE AS FOLLOWS.

1. FORTY-EIGHT INCHES FOR STEPPED AISLES HAVING SEATING ON EACH SIDE.

2. THIRTY-SIX INCHES FOR STEPPED AISLES HAVING SEATING ON ONLY ONE SIDE.

3. TWENTY-THREE INCHES BETWEEN A STEPPED AISLE HANDRAIL OR GUARD AND SEATING WHERE THE AISLE HAS A MID-AISLE HANDRAIL.

4. FORTY-TWO INCHES FOR LEVEL OR RAMPED AISLES HAVING SEATING ON BOTH SIDES.

405.3 AISLE WIDTH. THE AISLE WIDTH SHALL PROVIDE SUFFICIENT EGRESS CAPACITY FOR THE NUMBER OF PERSONS ACCOMMODATED BY THE CATCHMENT AREA SERVED BY THE AISLE IN ACCORDANCE WITH SECTION 404.5. THE CATCHMENT AREA SERVED BY AN AISLE IS THAT PORTION OF THE TOTAL SPACE THAT IS SERVED BY THAT SECTION OF THE AISLE. IN ESTABLISHING CATCHMENT AREAS, THE ASSUMPTION SHALL BE MADE THAT THERE IS A BALANCED USE OF ALL MEANS OF EGRESS, WITH THE NUMBER OF PERSONS IN PROPORTION TO EGRESS CAPACITY.

405.4 CONVERGING AISLES. WHERE AISLES CONVERGE TO FORM A SINGLE PATH OF EGRESS TRAVEL, THE REQUIRED EGRESS CAPACITY OF THAT PATH SHALL NOT BE LESS THAN THE COMBINED REQUIRED CAPACITY OF THE CONVERGING AISLES.

405.5 UNIFORM WIDTH. THOSE PORTIONS OF AISLES, WHERE EGRESS IS POSSIBLE IN EITHER OF TWO DIRECTIONS, SHALL BE UNIFORM IN WIDTH AND SHALL BE MEASURED IN ACCORDANCE WITH SECTION 404.5.1.

405.6 DEAD ENDS. THE LENGTH OF A DEAD-END AISLE SHALL NOT EXCEED 16 ROWS IN NONSMOKE-PROTECTED ASSEMBLY SEATING AND 21 ROWS IN SMOKE-PROTECTED ASSEMBLY SEATING.
EXCEPTIONS: DEAD-END AISLES TERMINATING AT A CROSS AISLE OR VOMITORY PROVIDING ACCESS TO AN EXIT AT ONLY ONE END AND COMPLYING WITH ANY ONE OF THE FOLLOWING SHALL BE PERMITTED.

2. FOR SMOKE-PROTECTED OR OPEN-AIR ASSEMBLY SEATING, DEAD-END AISLES EXCEEDING 21 ROWS ARE PERMITTED WHERE SEATS BEYOND THE TWENTY-FIRST ROW ARE NO MORE THAN 40 SEATS FROM ANOTHER AISLE, MEASURED ALONG A ROW OF SEATS HAVING AN AISLE ACCESSWAY WITH A MINIMUM CLEAR WIDTH OF 12 INCHES PLUS 0.3 INCH FOR EACH ADDITIONAL SEAT BEYOND SEVEN WHERE SEATS HAVE BACKRESTS OR BEYOND TEN WHERE SEATS ARE WITHOUT BACKRESTS IN THE ROW.

SECTION 406 STAIRS AND STEPPED AISLES

406.1 STAIRS. STAIR TREADS AND RISERS SHALL BE AS REQUIRED BY THE BUILDING CODE. STEPPED AISLES SHALL COMPLY WITH SECTIONS 406.2 THROUGH 406.7.
EXCEPTION: A STAIR THAT CONNECTS A STEPPED AISLE TO A CROSS AISLE SHALL BE PERMITTED TO COMPLY WITH THE STEPPED AISLE REQUIREMENTS OF SECTIONS 406.2 THROUGH 406.7.

406.2 TREADS AND RISERS. STEPPED AISLES SHALL CONSIST OF A SERIES OF TREADS AND RISERS THAT EXTEND ACROSS THE FULL WIDTH OF THE AISLE. STEPPED AISLES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE REQUIREMENTS OF THIS SECTION.

406.3 TREAD DEPTH TREAD DEPTH SHALL BE A MINIMUM OF 11 INCHES. THE TOLERANCE BETWEEN ADJACENT TREADS SHALL NOT EXCEED 0.188 INCH. EXISTING TREAD DEPTH IS 12.75 INCHES AND DEPTH VARIES BETWEEN TREADS

406.5 TREAD MARKING STRIPE. A CONTRASTING MARKING STRIPE SHALL BE PROVIDED ON EACH TREAD AT THE NOSING OR LEADING EDGE SUCH THAT THE LOCATION OF EACH TREAD IS READILY APPARENT WHEN VIEWED IN DESCENT. SUCH STRIPE SHALL BE NOT LESS THAN 1 INCH, AND NOT MORE THAN 2 INCHES, WIDE.

406.6 RISER HEIGHT. RISER HEIGHT SHALL BE NOT LESS THAN 4 INCHES NOR MORE THAN 8 INCHES. RISERS HEIGHT IS 6 7/8 INCHES

406.7 RISER CONSTRUCTION RISERS SHALL BE OF SOLID CONSTRUCTION.

406.8 DIMENSIONAL UNIFORMITY. STEPPED AISLE TREADS AND RISERS SHALL BE OF UNIFORM SIZE AND SHAPE. THE TOLERANCE BETWEEN THE LARGEST AND SMALLEST RISER OR BETWEEN THE LARGEST AND SMALLEST TREAD SHALL NOT EXCEED 0.375 INCH IN ANY FLIGHT OF THE STEPPED AISLE.

406.8.1 TREAD AND RISER NONUNIFORMITY PERMITTED. TREADS AND RISERS LOCATED IN TRANSITION AREAS BETWEEN ADJACENT TIERED SEATING ELEMENTS, PARABOLIC SEATING CONFIGURATIONS OR ONTO OR OFF OF TIERED SEATING ARE NOT REQUIRED TO BE OF UNIFORM DEPTH OR HEIGHT WHERE A MID-AISLE HANDRAIL IS PROVIDED. THE HANDRAIL SHALL MEET THE REQUIREMENTS OF SECTION 409. MID-AISLE HANDRAILS IN TRANSITION AREAS SHALL EXTEND THE FULL LENGTH OF THE TRANSITION AND A MINIMUM OF ONE TREAD DEPTH, PARALLEL TO THE RUN OF THE STEPPED AISLES, ABOVE AND BELOW THE UPPERMOST AND LOWERMOST RISER IN THE TRANSITION. WHERE EXTENSIONS OF THE AISLE HANDRAIL INTERFERE WITH ADJACENT MEANS OF EGRESS, THE HANDRAIL EXTENSION SHALL TERMINATE AT THE RISER.

406.8.2 TREAD MARKING STRIPE AT NONUNIFORMITY. WHERE TREAD OR RISER NONUNIFORMITY EXCEEDS 0.188 INCH, A DISTINCTIVE MARKING STRIPE SHALL BE PROVIDED ON EACH TREAD ADJACENT TO THE NONUNIFORM TREAD OR RISER. THE MARKING SHALL BE PROVIDED ON EACH TREAD AT THE NOSING OR LEADING EDGE SUCH THAT THE LOCATION OF EACH TREAD IS READILY APPARENT WHEN VIEWED IN DESCENT. SUCH STRIPE SHALL BE A MINIMUM OF 1 INCH WIDE AND A MAXIMUM OF 2 INCHES WIDE. THE EDGE MARKING STRIPE SHALL BE DISTINCTIVELY DIFFERENT FROM THE STEPPED AISLE CONTRASTING MARKING STRIPE OF SECTION 406.5.

SECTION 407 AISLE ACCESSWAYS EXISTING CONDITION IS NON-COMPLIANT, BUT WORK INCREASES COMPLIANCE

407.1 REQUIRED AISLE ACCESSWAYS. AISLE ACCESSWAYS SHALL BE PROVIDED ABOVE THE FIRST ROW OF SEATING. AISLE ACCESSWAYS LOCATED MORE THAN 30 INCHES ABOVE THE FLOOR OR GROUND BELOW SHALL BE CONSTRUCTED SUCH THAT OPENINGS SHALL NOT ALLOW THE PASSAGE OF A SPHERE GREATER THAN 4 INCHES IN DIAMETER. WHERE BLEACHER-TYPE SEATING IS UTILIZED, SUCH SEATS SHALL BE A MINIMUM DEPTH OF 9 INCHES. ROW-TO ROW SPACING SHALL BE A MINIMUM OF 22 INCHES.

407.2 MINIMUM WIDTH. THE MINIMUM CLEAR AISLE ACCESSWAY WIDTH SHALL NOT BE LESS THAN 12 INCHES MEASURED AS THE CLEAR HORIZONTAL DISTANCE FROM THE BACK OF THE ROW AHEAD AND THE NEAREST PROJECTION OF THE ROW BEHIND.

407.3 DUAL ACCESS. FOR ROWS OF SEATING SERVED BY AISLES OR DOORWAYS AT BOTH ENDS, THERE SHALL NOT BE MORE THAN 100 SEATS PER ROW.
EXCEPTION: FOR OPEN-AIR ASSEMBLY SEATING, THE ROW LENGTH LIMITS FOR A 12-INCH-WIDE AISLE ACCESSWAY, BEYOND WHICH THE AISLE ACCESSWAY MINIMUM CLEAR WIDTH SHALL BE INCREASED, ARE IN TABLE 407.5.

407.4 SINGLE ACCESS. FOR ROWS OF SEATING SERVED BY AISLES AT ONLY ONE END OF THE ROW, THE MINIMUM CLEAR WIDTH OF 12 INCHES BETWEEN ROWS SHALL BE INCREASED BY 0.6 INCH FOR EVERY ADDITIONAL SEAT BEYOND TEN WHERE SEATS ARE WITHOUT BACKRESTS. THE MINIMUM CLEAR WIDTH IS NOT REQUIRED TO EXCEED 22 INCHES.

EXCEPTION: FOR OPEN-AIR ASSEMBLY SEATING, THE ROW LENGTH LIMITS FOR A 12-INCH-WIDE AISLE ACCESSWAY, BEYOND WHICH THE AISLE ACCESSWAY MINIMUM CLEAR WIDTH SHALL BE INCREASED, ARE IN TABLE 407.5.

407.4.1 PATH OF EGRESS TRAVEL. FOR ROWS OF SEATING SERVED BY ONLY ONE PATH OF EGRESS TRAVEL, THE COMMON PATH OF EGRESS TRAVEL SHALL NOT EXCEED 30 FEET FROM ANY SEAT TO A POINT WHERE A PERSON HAS A CHOICE OF TWO PATHS OF EGRESS TRAVEL TO TWO EXITS.

EXCEPTIONS:

1. IN SMOKE-PROTECTED OR OPEN-AIR ASSEMBLY SEATING, THE COMMON PATH OF EGRESS TRAVEL SHALL NOT EXCEED 50 FEET FROM ANY SEAT TO A POINT WHERE A PERSON HAS A CHOICE OF TWO PATHS OF EGRESS TRAVEL TO TWO EXITS.

2. FOR AREAS SERVING LESS THAN 50 OCCUPANTS, THE COMMON PATH OF EGRESS TRAVEL SHALL NOT EXCEED 75 FEET FROM ANY SEAT TO A POINT WHERE A PERSON HAS A CHOICE OF TWO PATHS OF EGRESS TRAVEL TO TWO EXITS.

3. WHERE BENCH-TYPE SEATING WITHOUT BACKRESTS IS UTILIZED AND THE TOP OF THE BENCH IS NO MORE THAN 7 INCHES ABOVE THE FOOTREST IMMEDIATELY BEHIND, THE COMMON PATH OF EGRESS TRAVEL SHALL NOT EXCEED 75 FEET FROM ANY SEAT TO A POINT WHERE A PERSON HAS A CHOICE OF TWO PATHS OF EGRESS TRAVEL TO TWO EXITS.

407.4.2 PATH THROUGH ADJACENT ROWS. WHERE ONE OF THE TWO PATHS OF TRAVEL IS ACROSS THE AISLE THROUGH A ROW OF SEATS TO ANOTHER AISLE, THERE SHALL NOT BE MORE THAN 24 SEATS BETWEEN THE TWO AISLES; AND THE MINIMUM CLEAR WIDTH BETWEEN ROWS FOR THE ROW BETWEEN THE TWO AISLES SHALL BE 12 INCHES PLUS 0.6 INCH FOR EACH ADDITIONAL SEAT BEYOND SEVEN WHERE SEATS HAVE BACKRESTS OR BEYOND TEN WHERE SEATS ARE WITHOUT BACKRESTS IN THE ROW BETWEEN AISLES.

EXCEPTION: FOR SMOKE-PROTECTED OR OPEN-AIR ASSEMBLY SEATING THERE SHALL NOT BE MORE THAN 40 SEATS BETWEEN THE TWO AISLES AND THE MINIMUM CLEAR WIDTH SHALL BE 12 INCHES PLUS 0.3 INCH FOR EACH ADDITIONAL SEAT BEYOND SEVEN WHERE SEATS HAVE BACKRESTS OR BEYOND TEN WHERE SEATS ARE WITHOUT BACKRESTS IN THE ROW BETWEEN AISLES.

407.5 AISLE ACCESSWAYS. THE DESIGN OF AISLE ACCESSWAYS IN SMOKE-PROTECTED OR OPEN-AIR ASSEMBLY SEATING SHALL COMPLY WITH TABLE 407.5. EXISTING AISLES MAINTAINED AND WIDENED.

TABLE 407.5 AISLE ACCESSWAYS IN SMOKE-PROTECTED OR OPEN-AIR ASSEMBLY SEATING

TOTAL NUMBER OF SEATS IN THE SMOKE-PROTECTED OR OPEN-AIR ASSEMBLY OCCUPANCY	MAXIMUM NUMBER OF SEATS PER ROW PERMITTED TO HAVE A MINIMUM 12-INCH CLEAR WIDTH AISLE ACCESSWAY			
	Aisle or doorway at both ends of row		Aisle or doorway at one end of row only	
	Seats with backrests	Seats without backrests	Seats with backrests	Seats without backrests
Less than 4,000	14	21	7	10
4,000	15	22	7	10
7,000	16	23	8	11
10,000	17	24	8	11
13,000	18	25	9	12
16,000	19	26	9	12
19,000	20	27	10	13
22,000 and greater	21	28	11	14

SECTION 408 GUARDS

408.1 REQUIRED GUARDS. GUARDS SHALL BE PROVIDED IN THE FOLLOWING AREAS.

1. ALONG OPEN-SIDED WALKING SURFACES, CROSS AISLES, STEPPED AISLES, RAMPS AND LANDINGS OF TIERED SEATING AREAS WHICH ARE LOCATED MORE THAN 30 INCHES ABOVE THE FLOOR OR GRADE BELOW. SUCH GUARDS SHALL BE NOT LESS THAN 42 INCHES HIGH, MEASURED VERTICALLY ABOVE THE LEADING EDGE OF THE TREAD, ADJACENT WALKING SURFACE OR ADJACENT BENCH SEAT.

EXCEPTION: A GUARD IS NOT REQUIRED WHERE THE TIERED SEATING IS LOCATED ADJACENT TO A WALL AND THE SPACE BETWEEN THE WALL AND THE TIERED SEATING IS LESS THAN 4 INCHES.

2. WHERE AN ELEVATION CHANGE OF 30 INCHES OR LESS OCCURS BETWEEN A CROSS AISLE AND THE ADJACENT FLOOR OR GRADE BELOW, GUARDS NOT LESS THAN 26 INCHES ABOVE THE AISLE FLOOR SHALL BE PROVIDED.

EXCEPTION: WHERE THE BACKS OF SEATS ON THE FRONT OF THE CROSS AISLE PROJECT 24 INCHES OR MORE ABOVE THE ADJACENT FLOOR OF THE AISLE, A GUARD NEED NOT BE PROVIDED.

3. A GUARD SHALL BE PROVIDED FOR THE FULL WIDTH OF AN AISLE WHERE THE LOWEST POINT OF THE AISLE IS MORE THAN 30 INCHES ABOVE THE FLOOR OR GROUND BELOW. THE GUARD SHALL BE A MINIMUM OF 36 INCHES HIGH AND SHALL PROVIDE A MINIMUM 42 INCHES MEASURED DIAGONALLY BETWEEN THE TOP OF THE RAIL AND THE NOSING OF THE NEAREST AISLE STEP.

4. UNLESS SUBJECT TO THE REQUIREMENTS OF ITEM 3, A GUARD WITH A MINIMUM HEIGHT OF 26 INCHES SHALL BE PROVIDED WHERE THE FLOOR OR FOOTBOARD ELEVATION IS MORE THAN 30 INCHES ABOVE THE FLOOR OR GRADE BELOW AND THE GUARD WOULD OTHERWISE INTERFERE WITH THE SIGHTLINES OF IMMEDIATELY ADJACENT SEATING.

408.2 OPENING LIMITATIONS. OPEN GUARDS SHALL BE CONSTRUCTED OF MATERIALS SUCH THAT A 4-INCH-DIAMETER SPHERE CANNOT PASS THROUGH ANY OPENING UP TO A HEIGHT OF 34 INCHES. FROM A HEIGHT OF 34 INCHES TO 42 INCHES ABOVE THE ADJACENT WALKING SURFACES, A SPHERE 8 INCHES IN DIAMETER SHALL NOT PASS.

EXCEPTIONS:

1. THE TRIANGULAR OPENING FORMED BY THE RISER, TREAD AND BOTTOM RAIL AT THE OPEN SIDE OF A STEPPED AISLE OR TIERED SEATING SHALL BE OF A MAXIMUM SIZE SUCH THAT A SPHERE OF 6 INCHES IN DIAMETER CANNOT PASS THROUGH THE OPENING.

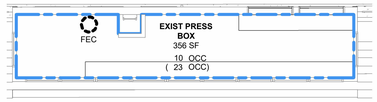
2. GUARDS AT THE END OF AISLES WHERE THEY TERMINATE AT A FASCIA OF BOXES, BALCONIES AND GALLERIES SHALL HAVE BALUSTERS OR ORNAMENTAL PATTERNS SUCH THAT A 4-INCHDIAMETER SPHERE CANNOT PASS THROUGH ANY OPENING UP TO A HEIGHT OF 26 INCHES. FROM A HEIGHT OF 26 INCHES OR GREATER ABOVE THE ADJACENT WALKING SURFACES, A SPHERE 8 INCHES IN DIAMETER SHALL NOT PASS.

3. THE OPENING LIMITATION SHALL NOT APPLY TO GUARDS REQUIRED IN ACCORDANCE WITH ITEM 2 OF SECTION 408.1.

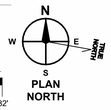
408.3 GUARD DESIGN. GUARDS AND THEIR ATTACHMENT SHALL BE DESIGNED TO RESIST THE LOADS INDICATED IN SECTION 303.

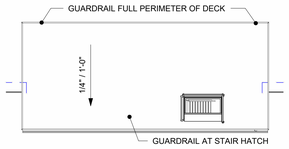
SECTION 409 HANDRAILS

409.1 REQUIRED HANDRAILS. WHERE SEATS ARE LOCATED ON BOTH SIDES OF A STEPPED AISLE, A MINIMUM OF ONE MID-AISLE HANDRAIL SHALL BE PROVIDED. WHERE SEATS ARE LOCATED ON ONE SIDE OF A STEPPED AISLE, A MINIMUM OF ONE HANDRAIL SHALL BE PROVIDED ON THE SIDE OF THE STEPPED AIS

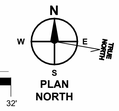


3 VISITOR PRESS BOX 2ND FLOOR
A0.4 1/8" = 1'-0"



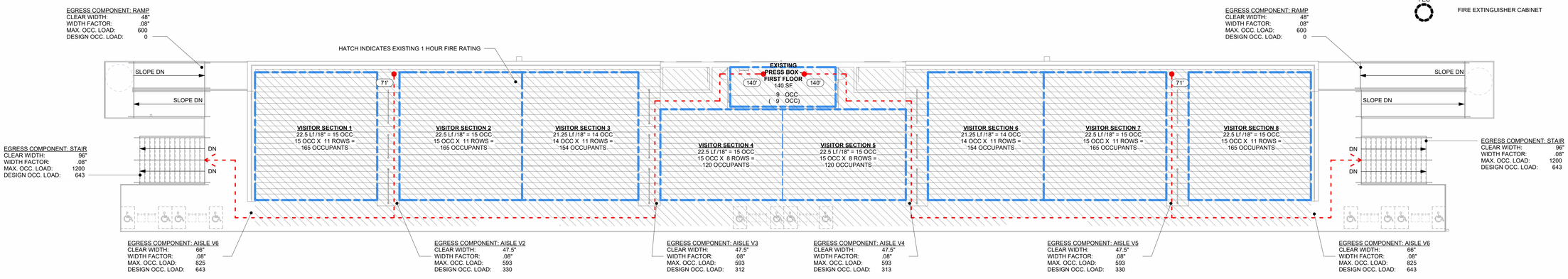


4 HOME PRESS BOX FILM DECK
A0.4 1/8" = 1'-0"



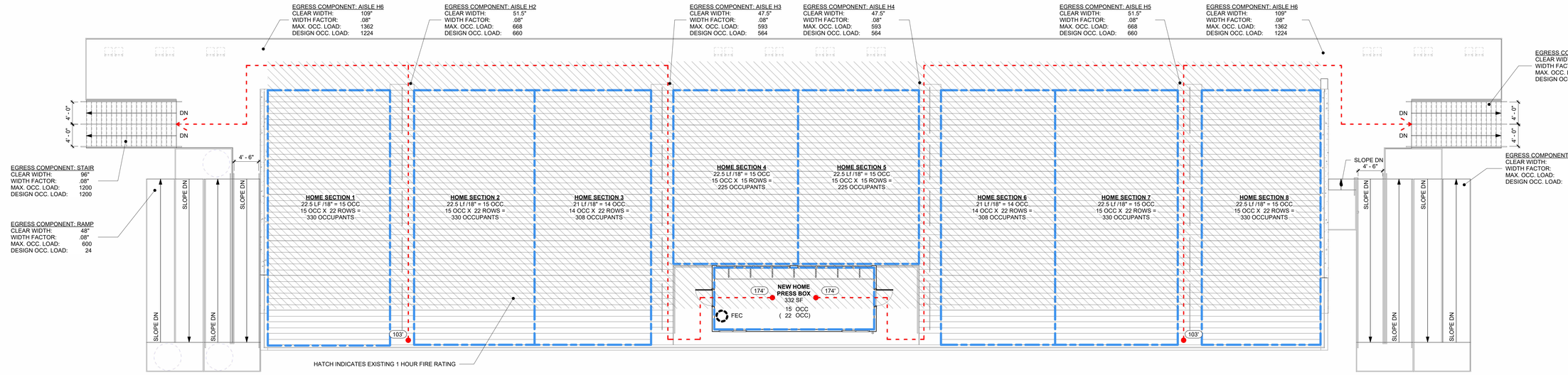
LEGEND

- EXIT PATH LEADING TO A HORIZONTAL OR EXTERIOR EXIT
- INDICATES (1) HR FIRE RATED ASSEMBLY
- CLASSROOM / 551 SF / 27 OCC / (35 OCC): ROOM NAME; SPACE SQUARE FOOTAGE; DESIGNED OCCUPANT LOAD; MAX OCCUPANT LOAD, BASED ON USE & AREA PER 2018 IBC
- DOOR / 446 / 120" / 420: EGRESS COMPONENT; MAXIMUM CAPACITY OF EGRESS COMPONENT PER IBC 2018; CLEAR WIDTH OF EGRESS COMPONENT PER OCCUPANT; MAXIMUM TRAVEL DISTANCE (IN FEET) 250' ALLOWED
- XXX: DESIGNED OCCUPANT LOAD OF EGRESS COMPONENT
- FEC: FIRE EXTINGUISHER CABINET



TOTAL OCCUPANT LOAD: 1,239 + 12 ADA = 1,251 OCCUPANTS

7 VISITOR BLEACHER LIFE SAFETY PLAN
A0.4 1/8" = 1'-0"



TOTAL OCCUPANTS LOAD: 2,421 + 20 ADA = 2,441 OCCUPANTS.

2 HOME BLEACHERS LIFE SAFETY PLAN
A0.4 1/8" = 1'-0"

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SEAL:

School District of Lancaster
Together We Can!

CONSULTANT:

RENOVATIONS
J.P. MCCASKEY STADIUM
PROJECTS
SCHOOL DISTRICT OF LANCASTER
445 N RESERVOIR ST, LANCASTER, PA 17602

ISSUE DATES
DATE: 03/05/2025
DESCRIPTION: CONFORMED SET

PROJ # : 24-SDL-03 DRAWN BY : WEM

SHEET TITLE:

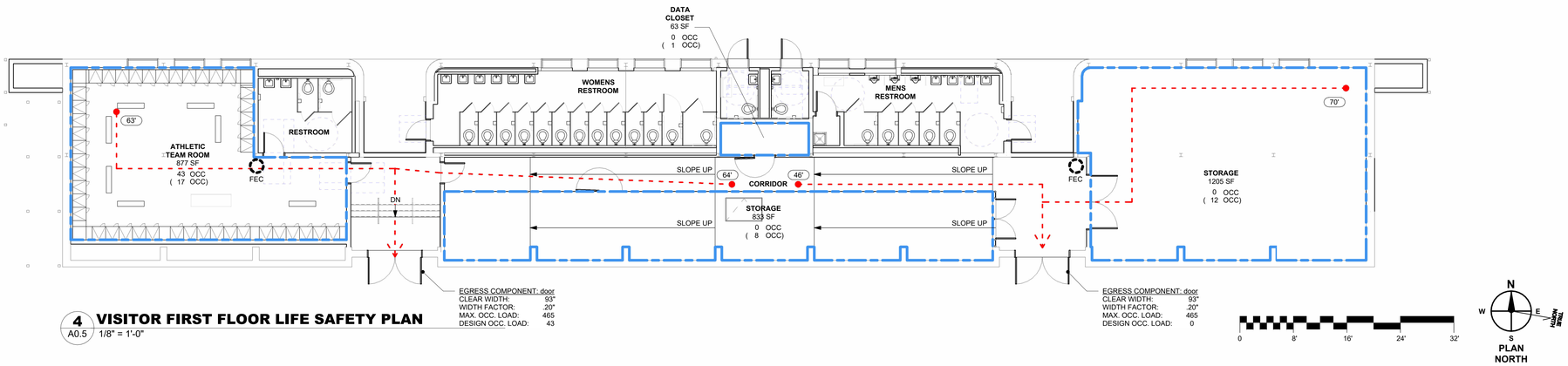
LIFE SAFETY PLANS - BLEACHERS

SHEET NUMBER:

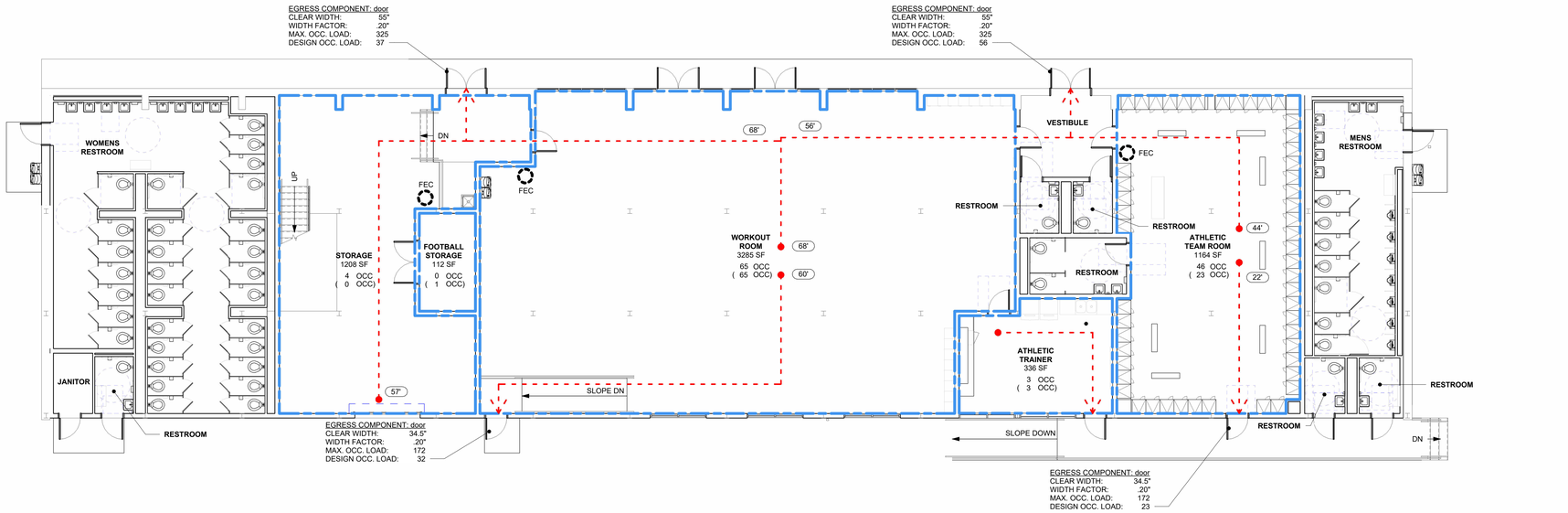
A0.4

CONFORMED SET

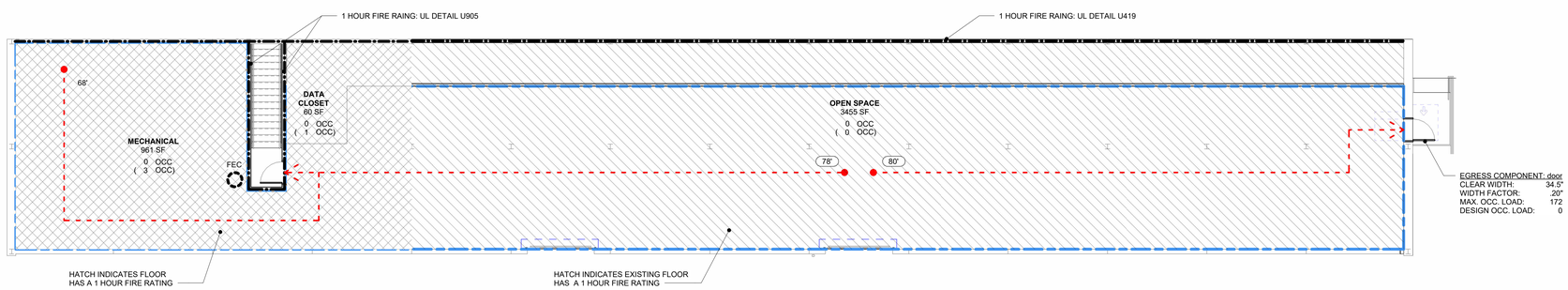
4/21/2025 5:10:14 PM



4 VISITOR FIRST FLOOR LIFE SAFETY PLAN
A0.5 1/8" = 1'-0"



5 HOME FIRST FLOOR LIFE SAFETY PLAN
A0.5 1/8" = 1'-0"



6 HOME SECOND FLOOR LIFE SAFETY PLAN
A0.5 1/8" = 1'-0"

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SEAL:

CONSULTANT:

School District of Lancaster
Together We Can!

RENOVATIONS
J.P. MCCASKEY STADIUM
PROJECTS
SCHOOL DISTRICT OF LANCASTER
445 N RESERVOIR ST, LANCASTER, PA 17602

ISSUE DATES
DATE: 03/05/2025
DESCRIPTION: CONFORMED SET

PROJ # : 24-SOL-03 DRAWN BY : WEM

SHEET TITLE:

LIFE SAFETY FLOOR PLANS

SHEET NUMBER:

A0.5

CONFORMED SET

4/21/2025 5:10:18 PM

Design No. U905

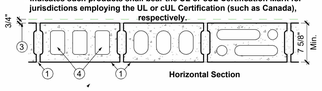
October 02, 2014

Bearing Wall Rating — 2 HR.

Nonbearing Wall Rating — 2 HR.

This design was evaluated using a load design method other than the Limit States Design Method (e.g., Working Stress Design Method). For jurisdictions employing the Limit States Design Method, such as Canada, a load restriction factor shall be used - See Guide BXUV or BXUV7

*** Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.**



Horizontal Section

1. **Concrete Blocks* —** Various designs. Classification D-2 (2 hr).

See **Concrete Blocks** category for list of eligible manufacturers.

2. **Mortar —** Blocks laid in full bed of mortar, nom. 3/8 in. thick, of not less than 2-1/4 and not more than 3-1/2 parts of clean sharp sand to 1 part Portland cement (proportioned by volume) and not more than 50 percent hydrated lime (by cement volume). Vertical joints staggered.

3. **Portland Cement Stucco or Gypsum Plaster —** Add 1/2 hr to classification if used. Where combustible members are framed in wall, plaster or stucco must be applied on the face opposite framing to achieve a max. Classification of 1-1/2 hr. Attached to concrete blocks (Item 1).

4. **Loose Masonry Fill —** If all core spaces are filled with loose dry expanded slag, expanded clay or shale (Rotary Kiln Process), water repellant vermiculite masonry fill insulation, or silicone treated perlite loose fill insulation add 2 hr to classification.

5. **Foamed Plastic* —** (Optional-Not Shown) — 1-1/2 in. thick max, 4 ft wide sheathing attached to concrete blocks (Item 1).

ATLAS ROOFING CORP — "EnergyShield Pro Wall Insulation" and "EnergyShield Pro 2 Wall Insulation."

HUNTER PANELS — Type Xci-Class A, Xci 286

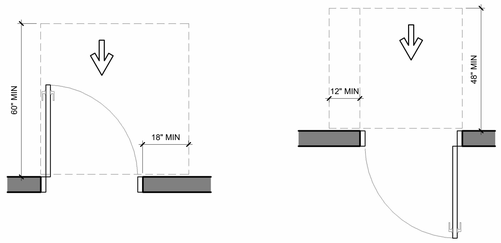
THE DOW CHEMICAL CO — Type Thermax Sheathing, Thermax Light Duty Insulation, Thermax Heavy Duty Insulation, Thermax Metal Building Board, Thermax White Finish Insulation, Thermax ci Exterior Insulation, Thermax IH Insulation, Thermax Plus Liner Panel and Thermax Heavy Duty Plus (HDP)

DESIGN NO. UL U419

FIRE RATING:	1 HOUR
STC RATING:	50
SOUND TEST:	USG-160727
SYSTEM THICKNESS:	5-1/2" [140 MM]
LOCATION:	INTERIOR
FRAMING TYPE:	STEEL STUD (NONLOAD-BEARING)

ASSEMBLY REQUIREMENTS:

GYPSUM PANELS:	TWO LAYERS 5/8" [15.9 MM] SHEETROCK® ECOSMART GYPSUM PANEL (UL TYPE ULIX™)
STEEL STUDS:	3-5/8" STEEL STUDS, EQ20 (0.018"), 24" O.C.
INSULATION:	3-1/2" FIBERGLASS INSULATION
GYPSUM PANELS:	ONE LAYER 5/8" [15.9 MM] SHEETROCK® ECOSMART GYPSUM PANEL (UL TYPE ULIX™)

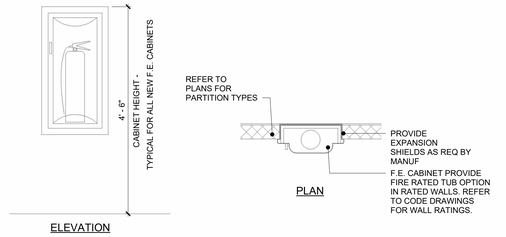


(A) FRONT APPROACH, PULL SIDE

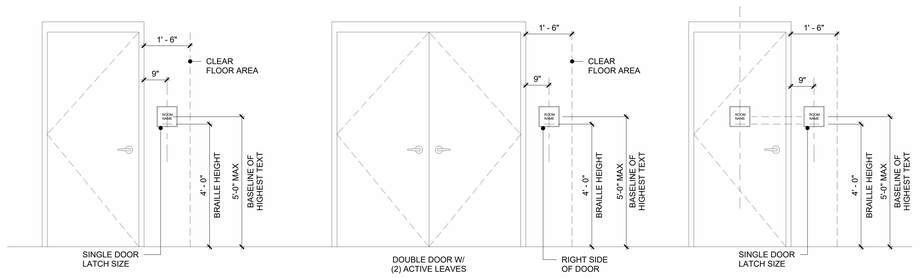
*IF BOTH CLOSER AND LATCH ARE PROVIDED
(B) FRONT APPROACH, PUSH SIDE

REFER TO SECTION 404.2.3 MANEUVERING CLEARNANCES FOR ADDITIONAL COMPLIANCE INFORMATION.

1 ACCESSIBLE DOOR SWING APPROACH
1/2" = 1'-0"



2 F.E. CAB INSTALLATION DETAIL
3/4" = 1'-0"



NOTE: REFER TO SPECIFICATIONS FOR SIGNAGE SIZE AND LOCATION REQUIREMENTS.

3 TACTILE SIGNAGE
1/2" = 1'-0"

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SEAL:

School District of Lancaster
Together We Can!

CONSULTANT:

RENOVATIONS
J.P. MCCASKEY STADIUM
PROJECTS
SCHOOL DISTRICT OF LANCASTER
445 N RESERVOIR ST, LANCASTER, PA 17602

ISSUE DATES	DESCRIPTION:
DATE:	
03/05/2025	CONFORMED SET

PROJ # : 24-SDL-03 DRAWN BY : WEM

SHEET TITLE:

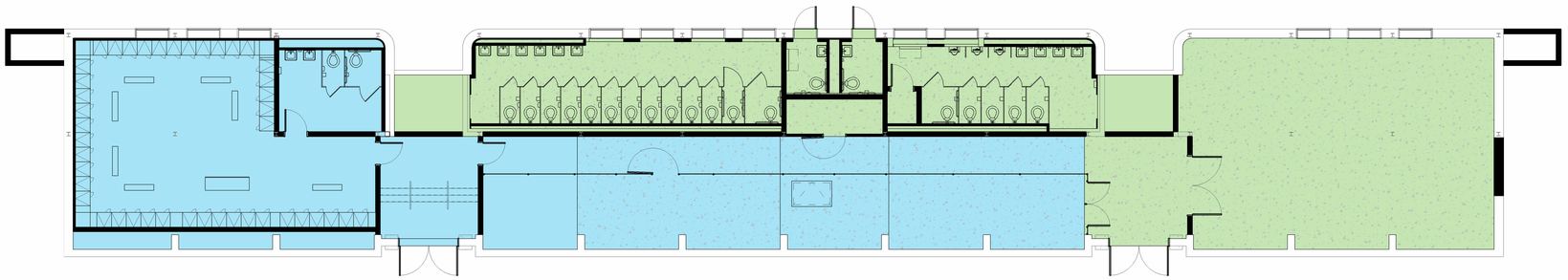
ADA / UL DETAILS

SHEET NUMBER:

A0.6

CONFORMED SET

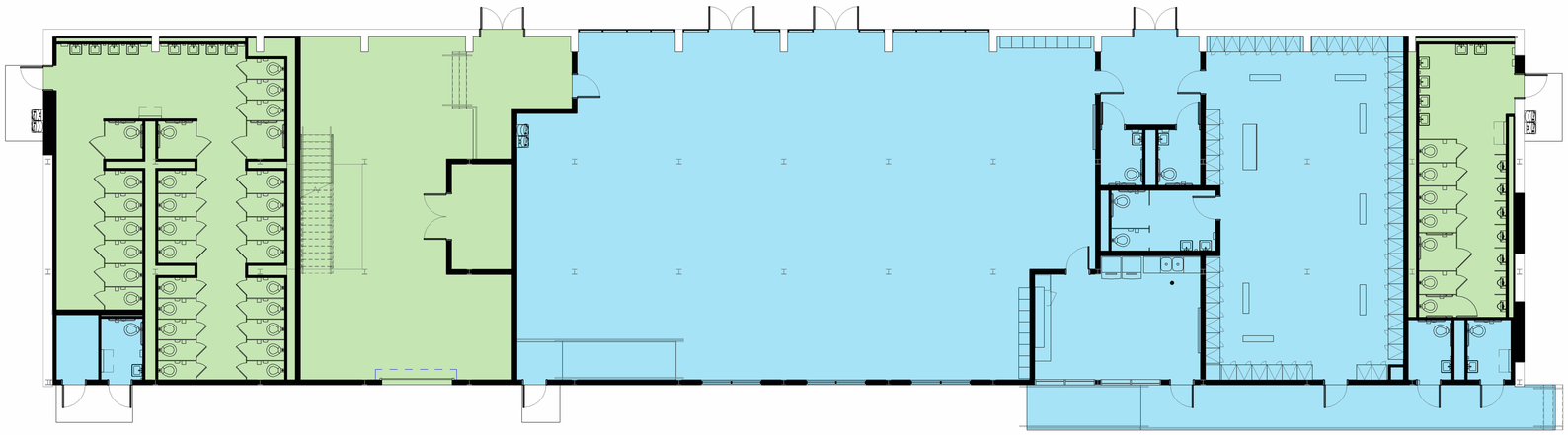
4/21/2025 5:10:22 PM



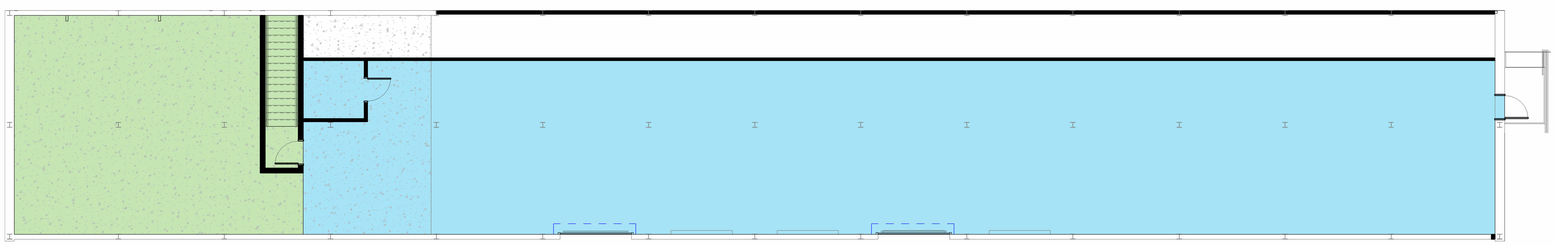
PHASE 1 — MARCH 3, 2025 - AUGUST 18, 2025 INCLUDED ALL WORK ON BLEACHER LEVELS

PHASE 2 — MARCH 3, 2025 - OCTOBER 20, 2025

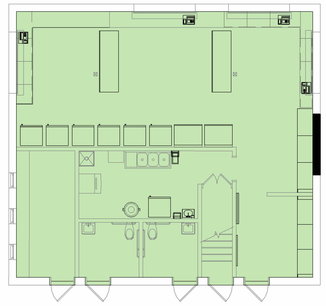
1 VISITOR FIRST FLOOR PHASING PLAN
A0.7 1/8" = 1'-0"



2 HOME FIRST FLOOR PHASING PLAN
A0.7 1/8" = 1'-0"



3 HOME SECOND FLOOR PHASING PLAN
A0.7 1/8" = 1'-0"



5 CONCESSION STAND PHASING PLAN
A0.7 1/8" = 1'-0"

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SEAL:
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School District of Lancaster
Together We Can!

CONSULTANT:

RENOVATIONS
J.P. MCCASKEY STADIUM
PROJECTS
SCHOOL DISTRICT OF LANCASTER
445 N RESERVOIR ST, LANCASTER, PA 17602

ISSUE DATES
DATE: 03/05/2025 DESCRIPTION: CONFORMED SET

PROJ # : 24-SDL-03 DRAWN BY : SAB

SHEET TITLE:
PHASING PLANS

SHEET NUMBER:
A0.7

CONFORMED SET

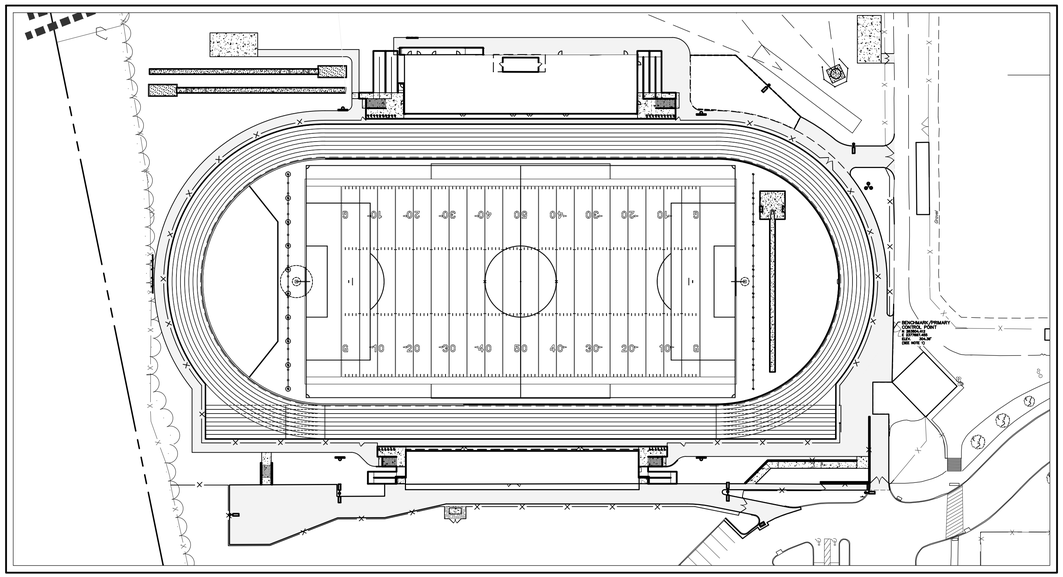
4/21/2025 5:10:27 PM

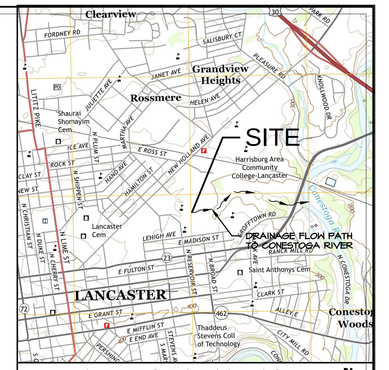
FINAL LAND DEVELOPMENT PLAN

FOR

McCASKEY HIGH SCHOOL STADIUM RENOVATIONS

CITY OF LANCASTER - LANCASTER COUNTY - PENNSYLVANIA





LOCATION MAP

SCALE: 1" = 2000'

CERTIFICATE OF ACCURACY (SURVEY)

I HEREBY CERTIFY THAT, TO THE BEST OF MY KNOWLEDGE, THE SURVEY AND PLAN SHOWN AND DESCRIBED HEREON IS TRUE AND CORRECT TO THE ACCURACY REQUIRED BY THE LANCASTER CITY SUBDIVISION AND LAND DEVELOPMENT ORDINANCE.

_____

_____, 20____

CERTIFICATE OF PLAN ACCURACY

I HEREBY CERTIFY THAT, TO THE BEST OF MY KNOWLEDGE, THE PLAN SHOWN AND DESCRIBED HEREON IS TRUE AND CORRECT TO THE ACCURACY REQUIRED BY THE LANCASTER CITY SUBDIVISION AND LAND DEVELOPMENT ORDINANCE.

_____

_____, 20____

CERTIFICATE OF ACCURACY FOR (STORM WATER MANAGEMENT)

I HEREBY CERTIFY THAT, TO THE BEST OF MY KNOWLEDGE, THE (STORM WATER MANAGEMENT FACILITIES OR OTHER PLAN DETAILS NOT COVERED BY THE CERTIFICATE OF PLAN ACCURACY) SHOWN AND DESCRIBED HEREON ARE DESIGNED IN CONFORMANCE WITH THE LANCASTER CITY SUBDIVISION AND LAND DEVELOPMENT ORDINANCE.

_____

_____, 20____

CERTIFICATE FOR LANCASTER CITY PLANNING COMMISSION APPROVAL

APPROVED BY THE LANCASTER CITY PLANNING COMMISSION THIS _____ DAY OF _____, 20___.

_____

CHAIRPERSON OR VICE-CHAIRPERSON

CERTIFICATE FOR LANCASTER CITY ENGINEER APPROVAL

APPROVED BY THE CITY ENGINEER THIS _____ DAY OF _____, 20___.

_____

CITY ENGINEER

THE CITY OF LANCASTER STORMWATER MANAGEMENT SITE PLAN APPROVAL CERTIFICATION

ON THIS DATE _____, 20____, THE CITY OF LANCASTER APPROVED THIS PROJECT, AND ALL CONDITIONS HAVE BEEN MET. THIS APPROVAL INCLUDES THE COMPLETE SET OF PLANS AND INFORMATION THAT ARE FILED WITH THE CITY OF LANCASTER IN FILE NO._____, BASED UPON ITS CONFORMITY WITH THE STANDARDS OF THE CITY OF LANCASTER STORMWATER MANAGEMENT ORDINANCE.

_____

DIRECTOR

CERTIFICATE FOR LANCASTER COUNTY PLANNING DEPARTMENT'S REVIEW CERTIFICATE

THIS PLAN, BEARING LCPC FILE NO._____, WAS REVIEWED BY STAFF OF THE LANCASTER COUNTY PLANNING DEPARTMENT ON _____, 20____, AS REQUIRED BY THE PENNSYLVANIA MUNICIPALITIES PLANNING CODE, ACT 247, OF 1968, AS AMENDED. THIS CERTIFICATE DOES NOT REPRESENT NOR GUARANTEE THAT THIS PLAN COMPLIES WITH THE VARIOUS ORDINANCES, RULES, REGULATIONS, OR LAWS OF THE LOCAL MUNICIPALITY, THE COMMONWEALTH, OR THE FEDERAL GOVERNMENT.

_____

SIGNATURE OF THE CHAIRPERSON OR THEIR DESIGNEE

CERTIFICATE OF OWNERSHIP, ACKNOWLEDGMENT OF PLAN, AND OFFER OF DEDICATION - THE SCHOOL DISTRICT OF LANCASTER , A PENNSYLVANIA NON-PROFIT CORPORATION

COMMONWEALTH OF PENNSYLVANIA
COUNTY OF LANCASTER

ON THIS THE _____ DAY OF _____ , 20___ , BEFORE ME, THE UNDERSIGNED DESIGNEE, PERSONALLY APPEARED _____ BEING AUTHORIZED BY THE SCHOOL DISTRICT OF LANCASTER , A PENNSYLVANIA NON-PROFIT CORPORATION (THE "SCHOOL"), WHO BEING DULY SWORN ACCORDING TO THE LAW, DEPOSES AND SAYS THAT THE SCHOOL IS THE OWNER OF THE PROPERTY SHOWN ON THIS PLAN, THAT HE IS AUTHORIZED TO EXECUTE SAID PLAN ON BEHALF OF THE SCHOOL, THAT THE PLAN IS ACT AND DEED OF THE SCHOOL , THAT THE SCHOOL DESIRES THE SAME TO BE RECORDED, AND ON BEHALF OF THE SCHOOL DISTRICT FURTHER ACKNOWLEDGES THAT ALL STREETS AND OTHER PROPERTY IDENTIFIED AS PROPOSED PUBLIC PROPERTY ARE HEREBY DEDICATED TO THE PUBLIC USE (EXCEPTING THOSE AREAS LABELED "NOT FOR DEDICATION").

_____

_____

MY COMMISSION EXPIRES _____, 20___

LANDOWNER ACKNOWLEDGEMENT OF PERMANENCE OF STORMWATER FACILITIES

I (WE) THE UNDERSIGNED OWNER(S) OF THE REAL ESTATE SHOWN AND DESCRIBED HEREON, DO ACKNOWLEDGE THE STORMWATER MANAGEMENT FACILITIES SHOWN AND DESCRIBED HEREON ARE TO BE PERMANENT FIXTURES THAT CANNOT BE ALTERED OR REMOVED UNLESS A REVISED PLAN IS APPROVED BY THE CITY OF LANCASTER.

_____ _____

OWNER(S) DATE

SITE DATA

ZONING DATA-R2 DISTRICT

ZONING DISTRICT:	R2 - OTHER PRINCIPAL STRUCTURE/USE
EXISTING LAND USE:	ACCESSORY USE - STADIUM
PROPOSED LAND USE:	ACCESSORY USE - STADIUM
PERMITTED USE:	BY RIGHT
UNITS OF OCCUPANCY:	1

	ORDINANCE REQUIREMENT
MIN. LOT AREA:	8,000 S.F.
MIN. LOT WIDTH:	60'
MIN. LOT DEPTH:	100'
FRONT SETBACK	20'
SIDE SETBACK	10'
SIDE COMBINED SETBACK	25'
REAR SETBACK	25'
MAXIMUM LOT COVERAGE	55%
MAXIMUM BUILDING COVERAGE	40%
MAXIMUM BUILDING HEIGHT	38', 3 STORIES

LOT AREA (CITY OF LANCASTER):	71.06 AC (70.80 AC NET R.O.W.)
LOT AREA (MANHEIM TOWNSHIP):	40.10 AC (39.81 AC NET R.O.W.)
TOTAL LOT AREA:	111.16 AC (110.61 AC NET R.O.W.)
WATER SERVICE:	PUBLIC (CITY)
SEWER SERVICE:	PUBLIC (CITY)
*NO WATER AND SEWER IS PROPOSED	AS PART OF THIS PROJECT
EXISTING LOT COVERAGE (CITY):	40.2% +/- (28.43 AC / 70.80 AC)
PROPOSED LOT COVERAGE (CITY):	
INCLUDING SYNTHETIC TURF:	46.2 % +/- (32.73 AC / 70.80 AC)
NOT INCLUDING SYNTHETIC TURF:	43.2 % +/- (30.58 AC / 70.80 AC)
EARTH DISTURBANCE:	3.31 ACRES

PARKING TABULATIONS - STADIUM

EX. STADIUM SEATING:	6,261 SEATS / NO ADA SEATING
PROPOSED STADIUM SEATING:	3,642 SEATS WITH 32 ADA SEATING
PARKING REQUIREMENTS:	1 PER 4 SEATS
REQUIREMENTS W/ CURRENT SEATING:	1,566 SPACES
REQUIREMENTS W/ REDUCED SEATING:	923 SPACES
NET REDUCTION IN REQUIRED SPACES:	643 SPACES

CURRENT PARKING ON CAMPUS

MCCASKEY HS:	231 SPACES
MCCASKEY EAST:	313 SPACES
HICKERSHAM ELEMENTARY:	59 SPACES
LINCOLN MS:	128 SPACES
SCHEFFEY ADMINISTRATIVE:	36 SPACES
TOTAL PARKING ON CAMPUS:	767 SPACES

LANDOWNER STORMWATER ACKNOWLEDGEMENT

THE LANDOWNER UNDERSTANDS THAT SINKHOLE RISKS HAVE BEEN IDENTIFIED BY THE GEOTECHNICAL PROFESSIONAL FOR THE PROPOSED STORMWATER MANAGEMENT SYSTEMS AS DESIGNED TO ACCOMMODATE THE PROPOSED IMPROVEMENTS. THE LANDOWNER ASSUMES ALL RESPONSIBILITY FOR ANY ADVERSE CONDITIONS THAT MAY DEVELOP AS A RESULT OF THEIR STORMWATER SYSTEMS (INCLUDING INFILTRATION SYSTEMS) IN A CARBONATE GEOLOGY AREA WITHIN THEIR PROPERTY. THE STORMWATER MANAGEMENT SYSTEMS MONITORED FOR PROPER PERFORMANCE AND A GEOTECHNICAL PROFESSIONAL SHALL BE CONSULTED FOR ANY ADVERSE SITUATIONS THAT MAY DEVELOP.

_____ _____

OWNER(S) DATE

	ACRES	SF
EXISTING IMPERVIOUS (SITE)	1.83	79,715
NEW/RECONSTRUCTED IMPERVIOUS (SITE)	4.63	201,683
RIGHT OF WAY IMPERVIOUS - UNCHANGED	N/A	N/A

*NEW/RECONSTRUCTED IMPERVIOUS ASSUMES SYNTHETIC TURF AS IMPERVIOUS SURFACE

CONSTRUCTION ACTIVITIES SHALL NOT BE COMMENCED WITHOUT NOTIFYING THE PLANNING BUREAU, STORMWATER BUREAU, CITY ENGINEER, AND OTHER RELEVANT AGENCIES OF THE CITY.

PENNSYLVANIA ACT 121 (2008) REQUIRES NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN THE COMMONWEALTH.

DATE: 3/21/2025 BY: AJB SERIAL NO: 20250802874 - LANCASTER CITY
20250802875 - MANHEIM TOWNSHIP

NOTES: UNDERGROUND UTILITY LINE PROTECTION ACT

IN COMPLIANCE WITH AND PURSUANT TO THE PROVISIONS OF 73 P.S. §176, AS AMENDED BY ACT 121 OF 2008, LAND GRANT SURVEYORS, LLC. HAS PERFORMED THE FOLLOWING REQUIREMENTS IN PREPARING THESE DRAWINGS THAT INCLUDE EXCAVATION OR DEMOLITION WORK AT SITES WITHIN THE POLITICAL SUBDIVISION AND/OR LAND DEVELOPMENT SHOWN ON THE DRAWINGS HEREIN:

1. PURSUANT TO 73 P.S. §176(2), LAND GRANT SURVEYORS, LLC. HAS REQUESTED LINE AND FACILITY INFORMATION FROM THE ONE CALL SYSTEM NOT LESS THAN TEN (10) NOR MORE THAN NINETY (90) BUSINESS DAYS BEFORE FINAL DESIGN IS TO BE COMPLETED. IF SUCH INFORMATION WAS OBTAINED MORE THAN NINETY (90) DAYS BEFORE FINAL DESIGN IS TO BE COMPLETED, LAND GRANT SURVEYORS, LLC. HAS STATED IN THE REQUEST THAT THE WORK IS PRELIMINARY.

2. PURSUANT TO 73 P.S. §176(3), LAND GRANT SURVEYORS, LLC. HAS SHOWN, UPON REQUEST THESE DRAWINGS, THE POSITION AND TYPE OF EACH FACILITY OWNER'S LINE, AS DERIVES PURSUANT TO THE REQUEST MADE AS REQUIRED BY 73 P.S. §176(2), THE NAME OF THE FACILITY OWNER AND THE FACILITY OWNER'S DESIGNATED OFFICE ADDRESS AND TELEPHONE NUMBER.

3. PURSUANT TO 73 P.S. §176(5), LAND GRANT SURVEYORS, LLC. HAS CALLED THE ONE CALL SYSTEM AND SHOWN AS PROOF, THE SERIAL NUMBER OF THE ONE CALL NOTICE AND THE TOLL FREE NUMBER OF THE ONE CALL SYSTEM ON THE DRAWINGS NEAR THE SERIAL NUMBER.

4. IF, PURSUANT TO 73 P.S. §176(2), LAND GRANT SURVEYORS, LLC. HAS REQUESTED LINE AND FACILITY INFORMATION FROM THE ONE CALL SYSTEM MORE THAN NINETY (90) DAYS BEFORE FINAL DESIGN IS TO BE COMPLETED, LAND GRANT SURVEYORS, LLC. HAS INDICATED THAT THE REQUEST IS PRELIMINARY AND THE SERIAL NUMBER OF SAID REQUEST IS SHOWN ON THE DRAWINGS HEREIN.

LAND GRANT SURVEYORS, LLC. DOES NOT REPRESENT, WARRANT, ASSURE OR GUARANTEE THAT THE INFORMATION RECEIVED PURSUANT TO THE ONE CALL SYSTEM REQUEST AND AS REFLECTED ON THESE DRAWINGS IS ACCURATE OR CORRECT. FURTHERMORE, LAND GRANT SURVEYORS, LLC. INCLUDES THE INFORMATION ONLY PURSUANT TO THE REQUIREMENTS OF THE UNDERGROUND UTILITY LINE PROTECTION ACT, AS AMENDED BY ACT 121 OF 2008.

IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY THE LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION BY CALLING THE PENNSYLVANIA ONE CALL SYSTEM 1-800-242-1776 A MINIMUM OF THREE (3) DAYS PRIOR TO EXCAVATING OR WITH CAREFUL EXPLORATORY WORK; AT THE CONTRACTOR'S RISK, PRIOR TO CONSTRUCTION FOR THOSE PRIVATE LINES WHICH ARE NOT ABLE TO BE LOCATED THROUGH THE ONE CALL PROCESS. IT MAY BECOME NECESSARY IN THE FIELD TO ADJUST THE PROPOSED UTILITY LOCATION TO RESOLVE AND UTILITY CROSSING CONFLICTS WHICH MAY OCCUR. LAND GRANT SURVEYORS, LLC. SHALL BE NOTIFIED IMMEDIATELY OF ANY SUCH CONFLICTS ARE ENCOUNTERED. THE INFORMATION CONTAINED IN THIS SECTION AS IT RELATES TO THE DUTIES OF CONTRACTORS DOES NOT CONSTITUTE LEGAL ADVICE AND IN NO WAY REPRESENTS THE EXTENT OF THE CONTRACTOR'S DUTIES PURSUANT TO THE UNDERGROUND UTILITY LINE PROTECTION ACT. CONTRACTORS WITH QUESTIONS REGARDING THE UNDERGROUND UTILITY LINE PROTECTION ACT SHOULD CONSULT WITH AN ATTORNEY IMMEDIATELY.

UTILITY LISTING

CONTACT PA ONE CALL AT 1-800-242-1776 FOR INDIVIDUAL UTILITY TELEPHONE NUMBERS.

WINDSTREAM
1450 CENTER POINT RD
HIAWATHA, IA, 52233
LOCATE DESK PERSONNEL
locate.desk@windstream.com
800-289-1901*

U S I G LOCATING SERVICES
4045 N RIVER ROAD ST
E 300
INDIANAPOLIS, IN, 46240
JEFFREY TRUMBOWER
JeffTrumbower@usiglic.com
317-810-8254*

MANHEIM TOWNSHIP
1840 MUNICIPAL DR
LANCASTER, PA. 17601
RICK KANE
rkane@manheimtownship.org
717-569-6406 EXT. 1104*

FRONTIER COMMUNICATIONS OF PA INC
3000E LAIRD ST
WILKES BARRE, PA. 18702
MICHAEL NAVICH
Michael.Navich@FTR.com
570-208-3375*

LANCASTER CITY OF
150 PITNEY ROAD
LANCASTER, PA. 17601
BENJAMIN PERSHEN
BPERSHEN@CITYOFLANCASTERPA.GOV
717-735-0341*

PPL ELECTRIC UTILITIES CORPORATION
497 BLUE CHURCH RD
PAXINOS, PA. 17860
DOUG HAUPT
dlhaupt@pplweb.com
610-247-2461*

UGI UTILITIES INC
1301 AIP DR
MIDDLETOWN, PA. 17057
STEPHEN BATEMAN
sbateman@ugi.com
610-807-3174

VERIZON PENNSYLVANIA LLC
1026 HAY ST
PITTSBURGH, PA. 15221
DEBORAH BARUM
deborah.d.della@verizon.com
412-344-3401*

MODIFICATIONS:

SECTION

ACTION:_____ DATE:_____

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APPROVALS REQUIRED

PLANNING COMMISSION.....APPROVAL _____

NPDES PERMIT.....APPROVAL _____

OWNER

SCHOOL DISTRICT OF LANCASTER, PA
1051 LEHIGH AVENUE
LANCASTER, PA 17602

SOURCE OF TITLE

ACCOUNT NO. 390-31560-0-0000
SOURCE OF TITLE: DEED BK. 4238, PG. 562 (MANHEIM TOWNSHIP)
SUBD. PLAN BK. J-184, PG. 4

PROJECT SITE ADDRESS

445 N. RESERVOIR STREET, LANCASTER, PA 17602

SURVEYOR OF RECORD

LAND GRANT SURVEYORS
3904 ABEL DRIVE
COLUMBIA, PA 17512
(717) 285-1812

WATERSHED

UNT TO CONESTOGA RIVER - WWF-MF

REVISIONS PER:	DATE:	BY:
1. COL/LCCD COMMENTS	3/28/25	EWB
2. -	-	-
3. -	-	-
4. -	-	-
5. -	-	-

ELA SPORT
ATHLETIC FACILITIES DESIGN & CONSULTING
743 SOUTH BROAD STREET
LITITZ, PA 17543
(717) 626-7271 FAX (717) 626-7040
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COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
ELIZABETH WERNER BALDWIN
ENGINEER
PE080726

PENNSYLVANIA
CHAD D. CADDICK
REGISTERED LANDSCAPE ARCHITECT

STORMWATER MANAGEMENT PLAN	
SUBJECT:	
COVER	
MCCASKEY HIGH SCHOOL	
MCCASKEY HIGH SCHOOL STADIUM RENOVATIONS	
CITY OF LANCASTER - LANCASTER COUNTY - PENNSYLVANIA	
CLIENT:	
MM ARCHITECTS	
214 NORTH DUKE STREET	
LANCASTER, PA 17602	
(717) 393-3211	

MANAGER:	HDC	DATE:	February 6, 2025
DESIGNER:	EWB	PROJECT NO.	AZ202-015
DRAWN BY:	JMT	SCALE:	AS SHOWN

DRAWING NO.

01 OF 53

DRAWING: C:\Users\jmteeter\DC\ACCDocs\ELA Group\AZ202-015 McCaskey Stadium Renovations\Project Files\CAD Data\Land Development\LD-FRELIMCOVER-CURRENT.dwg - PLOTTED: Apr 02, 2025 2:16 pm

PLAN NOTES

GENERAL NOTES:

1. NO ONE SHALL SCALE FROM THESE PLANS TO CONSTRUCT OR LAYOUT ANY PART OF THIS PROJECT.
2. ELA GROUP, INC. MAKES NO REPRESENTATIONS AS TO THE SUBSURFACE CONDITIONS OF THE PROJECT SITE INCLUDING DEPTH OF BEDROCK, GEOLOGICAL CONDITIONS, SOIL STABILITY, ETC.
3. THE PROPERTY OWNER IS RESPONSIBLE TO KEEP ALL TREES TRIMMED IN ORDER TO OBTAIN/MAINTAIN THE PENNDOT DESIRABLE SAFE STOPPING SIGHT DISTANCES / CLEAR SIGHT TRIANGLES.
4. NOTHING SHALL BE PLACED, PLANTED, SET OR PUT WITHIN THE AREA OF AN EASEMENT THAT WOULD ADVERSELY AFFECT THE FUNCTION OF THE EASEMENT OR CONFLICT WITH THE EASEMENT AGREEMENT.
5. THE OWNER/DEVELOPER SHALL BE RESPONSIBLE FOR AND BEAR THE SOLE COST OF THE INSTALLATION OF ALL IMPROVEMENTS SHOWN ON THIS PLAN. ALL IMPROVEMENTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE REQUIREMENTS OF THE MUNICIPAL ZONING ORDINANCE, SUBDIVISION AND LAND DEVELOPMENT ORDINANCE AND STORM WATER MANAGEMENT ORDINANCE.
6. THE OWNER/DEVELOPER SHALL OBTAIN ALL APPROVALS AS NECESSARY FROM THE APPLICABLE BUILDING CODE AGENCY PRIOR TO CONSTRUCTION OF ANY BUILDINGS OR STRUCTURES.
7. ALL SITE CONSTRUCTION SHALL CONFORM TO THE PA BUILDING CODE & THE AMERICANS WITH DISABILITIES ACT (ADA).
8. DURING CONSTRUCTION OR UPON COMPLETION, THE MUNICIPALITY SHALL HAVE THE RIGHT, BUT NOT THE DUTY, OF ACCESS AT ANY TIME, TO INSPECT AND MAINTAIN THE FACILITY AT THE PROPERTY OWNER'S EXPENSE IF THE OWNER SHOULD FAIL TO PROPERLY CONSTRUCT OR MAINTAIN THE FACILITY.
9. ANY REVISIONS TO THESE PLANS AFTER THE DATE OF THE LATEST REVISION SHALL NOT BE THE RESPONSIBILITY OF ELA GROUP, INC. SUBSTITUTIONS FOR ANY MATERIALS, OR CHANGES TO THE PLAN, REQUIRES APPROVAL OF ELA GROUP, INC., THE MUNICIPALITY, OR THE AUTHORITY HAVING JURISDICTION (AS APPLICABLE).
10. ANY NON-STORMWATER CONNECTIONS TO THE PUBLIC STORM SEWER SYSTEM ARE STRICTLY PROHIBITED.

SURVEYING AND BASEMAPPING

1. BENCHMARK: TALL NAIL SET IN GRASS ON TOP OF HILL APPROXIMATELY 74FT WEST OF MANHOLE IN MCGASKEY AVENUE. ELEVATION= 325.24' NAVD 88 DATUM.
2. THIS PROPERTY WAS SURVEYED USING THE CURRENT DEEDS OF RECORD AND WITHOUT THE BENEFIT OF A "TITLE SEARCH". THIS SURVEY DOES NOT GUARANTEE OR IMPLY THAT THE PROPERTY IS NOT AFFECTED BY RIGHT-OF-WAY, EASEMENTS, RESTRICTIONS, ETC. WHICH MAY BE DISCOVERED BY A COMPLETE "TITLE SEARCH".
3. THIS PROPERTY LIES WITHIN A 100 YEAR FLOOD PLAIN (ZONE AE & ZONE X) ACCORDING TO FEMA FLOOD INSURANCE RATE MAPS #42071C0366F AND #42071C0361F DATED APRIL 5, 2016.
4. UNDERGROUND UTILITY LOCATIONS ARE APPROXIMATE AND WERE DETERMINED FROM VISIBLE LOCATION, ACT 121 UTILITY RESPONSES AND/OR BEST AVAILABLE PLAN INFORMATION. (LAND GRANT SURVEYORS, LLC. CANNOT GUARANTEE THE EXACT LOCATION OF UNDERGROUND UTILITIES OR STRUCTURES, AN EXACT LOCATION OR THE EXISTENCE OF OR NONEXISTENCE OF UNDERGROUND UTILITIES CAN ONLY BE OBTAINED BY SUBSURFACE EXPLORATION, WHICH IS NOT PART OF THIS CONTRACT PERFORMANCE).
5. BASIS OF BEARINGS TAKEN FROM A REALIZATION OF THE PENNSYLVANIA STATE PLANE COORDINATE SYSTEM SOUTH ZONE NAD 83.

DEMOLITION NOTES

1. LIMIT OF PAVING, CURB, SIDEWALK, UTILITIES AND OTHER IMPROVEMENTS TO BE REMOVED, OR PARTIALLY REMOVED, IS APPROXIMATE. DEMOLITION OF EXISTING IMPROVEMENTS IS AS REQUIRED TO COMPLETE THE WORK REQUIRED FOR CONSTRUCTION.
2. VERIFY ITEMS SCHEDULED FOR DEMOLITION AND LIMITS OF DEMOLITION PRIOR TO PROCEEDING WITH THE WORK.
3. SAWCUT AT THE LIMIT OF ALL PAVEMENT AND CURB TO BE REMOVED OR REMOVE TO NEAREST EXPANSION JOINT OR CONTROL JOINT ADJACENT TO THE LIMIT OF SCHEDULED REMOVAL.
4. REMOVE FOUNDATIONS OF EXISTING STRUCTURES TO BE DEMOLISHED TO A MINIMUM OF 24" BELOW FINISHED GRADING.
5. BACKFILL BASEMENT, CRAWL SPACES, AND OTHER VOIDS RESULTING FROM STRUCTURE REMOVAL WITH SOIL BACKFILL OR APPROVED STONE BACKFILL.
6. DO NOT REMOVE EXISTING UTILITIES REQUIRED FOR SERVICE UNTIL NEW UTILITIES HAVE BEEN PROVIDED OR TEMPORARY SERVICE CONNECTIONS PROVIDED. PROTECT ALL EXISTING UTILITIES TO REMAIN.
7. CAP/ABANDON EXISTING UTILITIES IN ACCORDANCE WITH UTILITY COMPANIES AND/OR AUTHORITIES HAVING JURISDICTION.
8. EXISTING UTILITIES TO BE ABANDONED MAY REMAIN IN-PLACE WHERE THEY WILL NOT INTERFERE WITH FINISHED WORK. ACCURATELY NOTE ALL UTILITIES ABANDONED IN-PLACE ON CONTRACTOR'S RECORD DRAWINGS.
9. BURNING OF TREES, SHRUBS, BRUSH AND OTHER MATERIALS ON-SITE PERMITTED ONLY WHEN APPROVED BY LOCAL AND OTHER REGULATORY AGENCIES HAVING JURISDICTION. COORDINATE LOCATION OF BURN PITS WITH OWNER.
10. LOCATION AND LIMIT OF TEMPORARY CONSTRUCTION FENCE IS APPROXIMATE. PROVIDE AS REQUIRED FOR THE WORK, TO ACCOMMODATE WORK OF OTHER TRADES, AND AS REQUIRED TO REDUCE POTENTIAL ACCIDENTAL TRESPASS. PROVIDE VEHICULAR ACCESS GATES AND MAN GATES WHERE REQUIRED FOR ACCESS (COORDINATE WITH CONSTRUCTION ENTRANCE LOCATIONS SHOWN ON EROSION AND SEDIMENT CONTROL PLAN).
11. PROVIDE TEMPORARY TRUNK AND ROOT PROTECTION FOR ALL EXISTING SPECIMEN TREES TO REMAIN OR WHERE TREES TO REMAIN COULD BE DAMAGED BY CONSTRUCTION ACTIVITIES.
12. REMOVE AND DISPOSE OF DEBRIS, INCLUDING, BUT NOT LIMITED TO TIRES, GLASS, SHEET METAL, DERELICT AUTOMOBILE(S) AND HOUSEHOLD APPLIANCES. LIMITS, COMPOSITION AND LOCATION OF DEBRIS APPROXIMATE. CONTRACTOR TO VERIFY IN FIELD AND SECURE ALL PERMITS NECESSARY FOR PROPER DISPOSAL.

SANITARY SEWER AND WATER:

1. ALL UTILITIES HAVE BEEN LOCATED BASED ON EXISTING SURFACE APPURTENANCES AND IN ACCORDANCE WITH ACT 38 OF 1991. THE CONTRACTOR SHALL NOTIFY ALL APPROPRIATE UTILITY COMPANIES AT LEAST 72 HOURS PRIOR TO THE START OF ANY CONSTRUCTION. THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF EXISTING UTILITIES AND ALL EFFORTS SHALL BE UNDERTAKEN TO PROTECT EXISTING UTILITIES AND MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE TO THE UTILITIES SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE. RESTORATION OF ALL EXISTING SURFACE IMPROVEMENTS DAMAGED OR ALTERED DURING CONSTRUCTION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
2. PRIOR TO BEGINNING WORK ON THE SITE, THE CONTRACTOR MUST PROVIDE A ONE CALL TO HAVE ALL UNDERGROUND UTILITIES LOCATED AND MARKED IN THE FIELD.
3. THE SITE IS SERVED BY PUBLIC SEWER. NO NEW PUBLIC SEWER IS PROPOSED.
4. THE SITE IS SERVED BY PUBLIC WATER. NO NEW PUBLIC WATER IS PROPOSED.
5. ALL CONNECTIONS TO THE EXISTING SANITARY MANHOLES SHALL BE CORE DRILLED AND PROPERLY SEALED WITH WATER-TIGHT JOINTS OR CONSTRUCTED PER THE SEWER AUTHORITY STANDARDS.
6. ALL EXISTING MANHOLE INFORMATION SHALL BE VERIFIED IN FIELD BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION.

STORMWATER MANAGEMENT NOTES

1. ALL STORM WATER FACILITIES ARE PERMANENT AND SHALL BE MAINTAINED BY THE OWNER, EXCLUDING THOSE DEDICATED FOR PUBLIC USE, IN THE "DESIGN CONDITION" ESTABLISHED BY THESE PLANS SO THAT THEY ARE PERFORMING THEIR DESIGNED FUNCTION, IN A MANNER ACCEPTABLE TO THE MUNICIPALITY AND AS REQUIRED BY THE MUNICIPAL STORMWATER MANAGEMENT ORDINANCE.
2. NO PERSON SHALL MODIFY, REMOVE, FILL, LANDSCAPE, OR ALTER ANY STORMWATER MANAGEMENT BMP'S, FACILITIES, AREAS, OR STRUCTURES WITHOUT WRITTEN APPROVAL OF THE CITY OF LANCASTER.
3. THE MUNICIPALITY IS NOT RESPONSIBLE FOR INSTALLATION OR MAINTENANCE OF ANY STORM WATER FACILITIES NOT DEDICATED FOR PUBLIC USE.
4. OWNERSHIP AND MAINTENANCE OF ALL STORMWATER MANAGEMENT FACILITIES SHALL BE THE RESPONSIBILITY OF THE LANDOWNER, THEIR SUCCESSORS AND ASSIGNS, UNLESS SPECIFICALLY IDENTIFIED OTHERWISE HEREIN.
5. NOTHING SHALL BE PLACED, PLANTED, SET, OR PUT WITHIN THE AREA OF A DRAINAGE EASEMENT OR STORM DRAINAGE FACILITY THAT COULD ADVERSELY AFFECT THE FUNCTION OF THE EASEMENT, ANY EASEMENT AGREEMENT, OR THE STORM DRAINAGE FACILITY.
6. THE CITY OF LANCASTER SHALL HAVE THE RIGHT OF ENTRY FOR PURPOSES OF INSPECTING ALL STORMWATER CONVEYANCE, TREATMENT, OR STORAGE FACILITIES. THE CITY OF LANCASTER SHALL HAVE THE RIGHT TO REQUIRE THAT THE LANDOWNER TAKE CORRECTIVE ACTION IN A REASONABLE PERIOD OF TIME NOT TO EXCEED 30 DAYS, IF THE LANDOWNER DOES NOT TAKE THE REQUIRED CORRECTIVE ACTION, THE CITY OF LANCASTER MAY EITHER PERFORM THE WORK OR CONTRACT FOR THE PERFORMANCE OF THE WORK AND BILL THE LANDOWNER FOR THE COST OF THE WORK PLUS A PENALTY OF 10% OF THE COST OF THE WORK.
7. MAINTENANCE OF STORMWATER MANAGEMENT FACILITIES SHALL INCLUDE PERFORMING ROUTINE MAINTENANCE, REPAIR AND/OR REPLACEMENT OF DAMAGED FACILITIES, VEGETATION OR STORMWATER AREAS TO CONDITIONS AS SHOWN ON THE APPROVED PLAN AND IN ACCORDANCE WITH THE SPECIFIC OWNERSHIP AND MAINTENANCE REQUIREMENTS NOTES/TABLES CONTAINED WITHIN THIS PLAN SET FOR THE SPECIFIC FACILITIES, THE MUNICIPAL STORMWATER MANAGEMENT ORDINANCE, AND IN ACCORDANCE WITH ALL STORMWATER MANAGEMENT AGREEMENTS EXECUTED WITH THE MUNICIPALITY.
8. THE STORMWATER MANAGEMENT AGREEMENT AND DECLARATION OF EASEMENT RECORDED AT THE RECORDER OF DEEDS OR EXECUTED WITH THE MUNICIPALITY AS PART OF THIS PLAN WOULD FURTHER IDENTIFY THE REQUIRED RESPONSIBILITIES OF OWNERSHIP AND MAINTENANCE OF THE STORMWATER MANAGEMENT FACILITIES.
9. THE MUNICIPALITY MAY REQUIRE ANNUAL INSPECTIONS AND REPORTING DOCUMENTATION REQUIREMENTS FOR CONSTRUCTED STORMWATER MANAGEMENT FACILITIES. IT SHALL BE THE RESPONSIBILITY OF THE LANDOWNER TO REVIEW ALL REQUIREMENTS NOTED ON THESE PLANS AND TO CONTACT THE MUNICIPALITY FOR ANY REQUIRED INSPECTION AND REPORTING REQUIREMENTS.
10. THE PROPOSED STORMWATER MANAGEMENT FACILITIES ARE DESIGNED FOR IMPROVEMENTS AS SHOWN ON THESE PLANS. ANY ADDITIONAL IMPERVIOUS COVERAGE , CHANGE IN LAND COVER, ADDITIONAL DRAINAGE AREA, ETC., BEYOND WHAT IS DOCUMENTED ON THESE PLANS AND THE POST CONSTRUCTION STORMWATER MANAGEMENT REPORT SHALL REQUIRE ADDITIONAL APPROVALS FROM THE MUNICIPALITY.
11. ALL EXISTING MANHOLE INFORMATION SHALL BE VERIFIED IN FIELD BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION.
12. ALL CONVEYANCE AND DETENTION FACILITIES SHALL BE KEPT FREE OF ANY DEBRIS OR OTHER OBSTRUCTION AND IN ORIGINAL DESIGN CONDITION.

STORMWATER MANAGEMENT CONSTRUCTION NOTES

1. CONTACT THE MUNICIPALITY PRIOR TO THE START OF CONSTRUCTION TO SCHEDULE A PRE-CONSTRUCTION MEETING. AT THE TIME OF THE PRE-CONSTRUCTION MEETING, REQUIRED INSPECTIONS OF STORMWATER MANAGEMENT FACILITIES BY THE MUNICIPALITY, MUNICIPAL ENGINEER, AND RESPONSIBLE DESIGN PROFESSIONAL SHALL BE ESTABLISHED. FURTHER INFORMATION REGARDING REQUIRED CRITICAL STAGES OF STORMWATER INSPECTIONS UNDER THE PADEP NPDES PERMIT WILL BE PROVIDED WITHIN THIS PLAN SET.
2. ALL STORM SEWERS AND APPURTENANCES SHALL BE CONSTRUCTED IN ACCORDANCE WITH REQUIREMENTS OF THE MUNICIPALITY, THE PENNSYLVANIA DEPARTMENT OF TRANSPORTATION, AND SPECIFIC REQUIREMENTS AS NOTED.
3. ALL STORMWATER MANAGEMENT FACILITIES SHOWN ON THIS PLAN SHALL BE CONSTRUCTED BY THE DEVELOPER IN ACCORDANCE WITH THE DESIGN, CONDITIONS, AND SPECIFICATIONS IDENTIFIED ON THIS PLAN.
4. THE STORMWATER COLLECTION, CONVEYANCE, AND MANAGEMENT SYSTEMS HAVE BEEN DESIGNED IN ACCORDANCE WITH DESIGN STANDARDS AND SPECIFICATIONS REQUIRED AT THE TIME OF PLAN APPROVALS. ELA GROUP, INC. ASSUMES NO RESPONSIBILITY FOR CHANGES IN SPECIFICATIONS THAT MAY OCCUR AFTER PLAN APPROVAL THAT WOULD REQUIRE ALTERNATE MATERIALS OR INSTALLATION REQUIREMENTS. THE CONTRACTOR SHALL VERIFY ALL CURRENT STANDARDS AND NOTIFY THE OWNER/DEVELOPER AND ELA GROUP, INC. OF ANY DISCREPANCIES THAT MAY EXIST PRIOR TO THE START OF CONSTRUCTION.
5. ALL INLET GRATES MUST BE SHALL BE BICYCLE SAFE. ALL TYPE 'C' INLETS SHALL BE SUMPED 2" WHERE SPECIFIED. THE TOP OF GRATE ELEVATION REFLECTS THE SPECIFIED SUMP.
6. FINAL GRADING AND STORMWATER DISCHARGE FROM SITE IMPROVEMENTS SHALL ENSURE THE APPROVED WATERSHED/DRAINAGE AREAS ARE DIRECTED TO THE COLLECTION, CONVEYANCE, AND STORMWATER MANAGEMENT FACILITIES AS PER THE APPROVED DESIGN. THE APPROVED WATERSHED/DRAINAGE AREAS MAPPING ARE LOCATED WITHIN THE PLAN SET AND/OR WITHIN THE POST CONSTRUCTION STORMWATER MANAGEMENT REPORT. ON-SITE DRAINAGE AREAS FOR EXISTING CONDITIONS HAVE BEEN DETERMINED/DELINEATED BASED UPON TOPOGRAPHIC INFORMATION PROVIDED BY OTHERS. IF ON-SITE DRAINAGE CONDITIONS DIFFER THAN WHAT IS REPRESENTED ON THE PLANS, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE DESIGN ENGINEER.
7. THE CONTRACTOR SHALL ENSURE POSITIVE DRAINAGE AWAY FROM ALL BUILDINGS, INCLUDING OVERLAND FLOWS, DISCHARGE FROM ROOF DOWNSPOUTS, AND OVERFLOW SYSTEMS.
8. FOR ANY FIELD REVISIONS, CHANGES, OR DEVIATIONS FROM THE APPROVED PLANS, THE APPLICANT MUST OBTAIN APPROVAL FROM THE MUNICIPALITY AND RESPONSIBLE PROFESSIONAL SITE CONSULTANT PRIOR TO PROCEEDING WITH SUCH REVISION(S).
9. ALL STORMWATER PIPING ARE TO BE PROVIDED WITH WATER TIGHT JOINTS AND CONNECTIONS. ALL SMOOTH LINED CORRUGATED POLYETHYLENE STORM PIPE (SLCPP) SHALL BE PROVIDED WITH INTEGRAL BELL AND SPIGOT JOINTS FOR A WATERTIGHT (WT) JOINT MEETING THE REQUIREMENTS OF AASHTO M252, AASHTO M294 OR ASTM F2306. THE JOINT SHALL BE WATERTIGHT (WT) ACCORDING TO THE REQUIREMENTS OF ASTM D3212 AND PROVIDE A MINIMUM 10.8 PSI PRESSURE RATING. GASKETS SHALL MEET THE REQUIREMENTS OF ASTM F477 AND SHALL BE INSTALLED BY THE PIPE MANUFACTURER AND COVERED WITH A REMOVABLE, PROTECTIVE WRAP TO ENSURE THE GASKET IS FREE OF DEBRIS. ALL REINFORCED CONCRETE STORM PIPE (RCP) SHALL BE PROVIDED WITH WATERTIGHT "O" RING GASKETS.
10. SUB SURFACE STORMWATER MANAGEMENT FACILITIES SUCH AS INFILTRATION SYSTEMS, UNDERGROUND PIPE SYSTEMS, ETC. THAT ARE NOT ACCESSIBLE POST CONSTRUCTION SHALL BE SURVEYED DURING INSTALLATION TO PROVIDE COMPLETE INFORMATION INCLUDING: LOCATION, INVERTS, DIMENSIONS, STONE LIMITS, DISTRIBUTION PIPING, ETC. THIS INFORMATION SHALL BE PROVIDED AS PART OF THE REQUIRED SURVEYED AS-BUILT PLANS AND REQUIRED ENGINEERING ANALYSIS/CERTIFICATION.

STORMWATER AS BUILT AND CONSTRUCTION CLOSE-OUT NOTES

1. AT THE COMPLETION OF THE PROJECT, AND AS PREREQUISITE FOR THE RELEASE OF FINANCIAL SECURITY, THE CONTRACTOR SHALL PROVIDE CERTIFICATION OF COMPLETION AND AN AS-BUILT PLAN AND ANALYSIS FROM A QUALIFIED PROFESSIONAL VERIFYING THAT ALL PERMANENT SWM FACILITIES HAVE BEEN CONSTRUCTED ACCORDING TO THE PLANS AND SPECIFICATIONS AND APPROVED REVISIONS THERETO TO THE CITY OF LANCASTER FOR REVIEW.
2. THE CONTRACTOR SHALL PROVIDE SURVEYED AS-BUILT PLANS AND PROFESSIONAL AS-BUILT ENGINEERING ANALYSIS/CERTIFICATION OF COMPLETED STORMWATER MANAGEMENT IMPROVEMENTS ARE REQUIRED TO BE SUBMITTED TO THE MUNICIPALITY FOR REVIEW IN ACCORDANCE WITH ALL CITY AND NPDES CRITERIA. THE AS-BUILT PLANS SHOW THE FINAL DESIGN SPECIFICATIONS FOR ALL STORMWATER MANAGEMENT FACILITIES AND BE SEALED BY A REGISTERED PROFESSIONAL ENGINEER. THE AS-BUILT PLANS MUST BE CERTIFIED BY A PROFESSIONAL SURVEYOR AND THE AS-BUILT ENGINEERING ANALYSIS/CERTIFICATION MUST BE CERTIFIED BY A PROFESSIONAL RECOGNIZED BY THE STATE FOR STORMWATER DESIGN. THE AS-BUILT PLANS SHALL SHOW COMPLETE INFORMATION FOR ALL CONSTRUCTED POST CONSTRUCTION STORMWATER MANAGEMENT FACILITIES AND SHALL PROVIDE AND MEET ALL REQUIRED MUNICIPAL AND PADEP NDPES PERMIT NOTICE OF TERMINATION (NOT) REQUIREMENTS (AS APPLICABLE). BOTH AN ELECTRONIC AND PDF FORMAT OF THE COMPLETED AS-BUILT WILL BE REQUIRED.
3. SEE PADEP NPDES PERMIT NOTES FOR ADDITIONAL AS-BUILT REQUIREMENTS.
4. UPON COMPLETION OF THE PLAN IMPROVEMENTS, THE APPLICANT SHALL SUBMIT AN AS-BUILT PLAN FOR THE RECORDATION IN THE OFFICE OF RECORDER OF DEEDS.
5. AS-BUILT PLANS MUST BE PROVIDED TO THE CITY IN HARDCOPY, PDF, AND AUTOCAD 2014. ALL COORDINATES SHALL BE BASED ON THE PA SOUTH ZONE STATE PLAN COORDINATE SYSTEM (NAD83 FOR HORIZONTAL AND NAVD88 FOR VERTICAL).
6. THE LANDOWNER SHALL KEEP ON FILE WITH THE CITY OF LANCASTER THE NAME, ADDRESS, AND TELEPHONE NUMBER OF THE PERSON OR COMPANY RESPONSIBLE FOR MAINTENANCE ACTIVITIES; IN THE EVENT OF A CHANGE, NEW INFORMATION WILL BE SUBMITTED TO THE CITY OF LANCASTER WITHIN 10 DAYS OF THE CHANGE.

EROSION AND SEDIMENT CONTROL NOTES

1. IN ACCORDANCE WITH THE REQUIREMENTS OF CHAPTER 102 OF THE ADMINISTRATIVE CODE, TITLE 25 (PA DEP RULES AND REGULATIONS), A COPY OF THE EROSION AND SEDIMENT CONTROL PLAN MUST BE AVAILABLE ON-SITE DURING CONSTRUCTION UNTIL THE SITE HAS BEEN PERMANENTLY STABILIZED.
2. THE MEASURES AND FACILITIES AS IDENTIFIED ON THE APPROVED EROSION AND SEDIMENTATION CONTROL PLAN SHALL BE APPLIED AND INSTALLED PRIOR TO THE COMMENCEMENT OF ANY EARTH MOVING, SITE WORK, OR CONSTRUCTION - AS PER THE CONSTRUCTION SEQUENCE IDENTIFIED ON THE APPROVED EROSION AND SEDIMENT CONTROL PLANS. ALL EROSION AND SEDIMENT CONTROL FACILITIES SHALL MEET THE REQUIREMENTS OF APPROVED EROSION AND SEDIMENT CONTROL PLAN, PADEP NPDES PERMIT (AS APPLICABLE), AND PA DEP CHAPTER 102 REGULATIONS.
3. SOILS INFORMATION SHOWN ON THE PLANS IS BASED UPON MAPPING AND INFORMATION PROVIDED FROM THE WEB SOIL SURVEY (HTTPS://WEBSOILSURVEY.SC.EGOV.USDA.GOV), UNLESS OTHERWISE NOTED. A QUALIFIED GEOTECHNICAL PROFESSIONAL SHALL BE CONSULTED FOR ALL SOIL-RELATED REQUIREMENTS INCLUDING LIMITATIONS, ISSUES, AND RESOLUTIONS INCLUDING UNSUITABLE SOILS, SUB SURFACE SUBSIDENCE, ETC.

PADEP NPDES PERMIT NOTES

1. THE PLANS WILL BE APPROVED UNDER A PADEP NDPES PERMIT. ALL PERMIT CONDITIONS AND REQUIREMENTS OF THE ISSUED/APPROVED NPDES PERMIT MUST BE STRICTLY ADHERED TO INCLUDING PRE CONSTRUCTION MEETINGS, CRITICAL STAGES OF INSPECTION BY A LICENSED PROFESSIONAL, CONSTRUCTION REPORTS, ADHERENCE TO APPROVED LIMITS OF DISTURBANCE, PROFESSIONAL CERTIFICATION OF COMPLETED STORMWATER MANAGEMENT FACILITIES, FILING OF NOTICE OF TERMINATION, ETC. A SUMMARY OF PERMIT CONDITIONS IS PROVIDED ON THE PLANS FOR REFERENCE.
2. THE CONTRACTOR SHALL PROVIDE REQUIRED SURVEYED AS-BUILT DOCUMENTATION OF THE PADEP NOTICE OF TERMINATION (N.O.T.) OF PADEP NPDES PERMIT MUST BE PROVIDED IN AN ELECTRONIC FORMAT TO THE CERTIFYING PROFESSIONAL AND SHALL PROVIDE ALL REQUIREMENTS OF THE PADEP NOTICE OF TERMINATION AS-BUILT CHECKLIST, INCLUDING ALL STORMWATER STRUCTURES, PIPE SYSTEMS, BMP GRADING, OUTLET STRUCTURES, CLEANOUTS, ETC. THE N.O.T. FOR THE PADEP NDPES PERMIT REQUIRES THE APPROVED AS BUILT SURVEY BE RECORDED AT THE RECORDER OF DEEDS.

GEOTECHNICAL STORMWATER NOTES:

1. ELA GROUP, INC. MAKES NO REPRESENTATIONS AS TO THE SUBSURFACE CONDITIONS OF THE PROJECT SITE INCLUDING DEPTH OF BEDROCK, GEOLOGICAL AND/OR ENVIRONMENTAL CONDITIONS, SOIL STABILITY, ETC.
2. WHERE SPECIFIED ON THE PLANS, ENGINEERED STORMWATER MANAGEMENT INFILTRATION SYSTEMS RELY ON PERMEABLE SOIL CONDITIONS TO DENATURE AND FUNCTION PROPERLY. AS PART OF THE DESIGN PROCESS, SOIL TESTING WILL BE PERFORMED TO ASSURE SUB SURFACE CONDITIONS ARE CONDUCIVE TO THE INFILTRATION OF STORMWATER. EVERY PRECAUTION MUST BE MAINTAINED BY THE CONTRACTOR DURING CONSTRUCTION TO ASSURE THAT COMPACTION DOES NOT OCCUR WHICH WOULD COMPROMISE THE PERMEABILITY OF THE SUBGRADE OF THE INFILTRATION FACILITIES. THE INFILTRATION AREAS MUST BE PROTECTED AGAINST COMPACTION FROM CONSTRUCTION ACTIVATES, SEDIMENT LADEN RUN-OFF, AND STOCK PILING. IF AFTER INSTALLATION, THE INFILTRATION FACILITIES DO NOT FUNCTION AS DESIGNED, AND THE CAUSE IS DETERMINED TO BE COMPACTION DURING CONSTRUCTION, THE CONTRACTOR WILL BE RESPONSIBLE TO PERFORM REMEDIATION, OUTLINED BY THE QUALIFIED PROFESSIONAL, TO RESTORE PRE-CONSTRUCTION PERMEABILITY.
3. THE INSTALLATION OF ALL STORMWATER BASINS AND SUBSURFACE STORMWATER MANAGEMENT SYSTEMS SHALL BE OVERSEEN BY A GEOTECHNICAL PROFESSIONAL AND SHALL BE CERTIFIED BY SUBGRADE INSPECTIONS AND IN-SITU INFILTRATION TESTING TO CONFIRM THAT THE SUBSOIL PERMEABILITY HAS BEEN MAINTAINED. IF THE BASINS AND SUBSURFACE SYSTEMS ARE NOT DESIGNED FOR INFILTRATION, THE SUBGRADE AND ANY ASSOCIATED REQUIRED IMPERVIOUS LINERS OR COMPACTED SUBGRADE SHALL ALSO BE CERTIFIED BY INSPECTIONS BY THE GEOTECHNICAL PROFESSIONAL. ALL DOCUMENTATION SHALL BE PROVIDED TO THE CERTIFYING PROFESSIONAL AND MUNICIPALITY.
4. THE MUNICIPALITY AND THE GEOLOGIST/GEOTECHNICAL ENGINEER OF RECORD SHALL BE NOTIFIED IN THE EVENT OF SUBSURFACE SUBSIDENCE ACTIVITY INCLUDING SINKHOLES AND ALL OTHER UNSUITABLE SUBSURFACE CONDITIONS IF ENCOUNTERED DURING THE CONSTRUCTION OF THE STORMWATER MANAGEMENT FACILITIES. A LICENSED PROFESSIONAL GEOLOGIST OR GEOTECHNICAL ENGINEER SHALL BE ENGAGED TO INVESTIGATE ALL UNSTABLE SUBSURFACE CONDITIONS AS IDENTIFIED ABOVE INCLUDING THE PREPARATION OF STABILIZATION PROCEDURES DIRECTING THE STABILIZATION WORK, AND MAKING RECOMMENDATIONS FOR CONSTRUCTION TECHNIQUES/PROCEDURES AND DESIGN MODIFICATIONS THAT WILL REDUCE THE POTENTIAL FOR FURTHER UNSUITABLE CONDITIONS AND POTENTIAL SUB SURFACE SUBSIDENCE.
5. A STORMWATER INFILTRATION AND CARBONATE ASSESSMENT REPORT WAS PERFORMED BY KLEINFELDER DATED DECEMBER 6, 2024. THE RECOMMENDATIONS AND DOCUMENTATION PROVIDED WITHIN THE GEOTECHNICAL REPORTS SHALL BE STRICTLY ADHERED TO, UNLESS OTHERWISE APPROVED BY THE GEOTECHNICAL PROFESSIONAL.

KARST-RELATED SUBSURFACE GEOLOGIC HAZARD NOTES:

1. THE LANDOWNER OF RECORD ACKNOWLEDGES THAT CARBONATE GEOLOGY AND THE ASSOCIATED RISK OF SINKHOLES AND SUBSURFACE SUBSIDENCE HAS BEEN IDENTIFIED ON THE SUBTRACT TRACT BY THE GEOTECHNICAL PROFESSIONAL PERFORMING THE STORMWATER INFILTRATION FEASIBILITY ANALYSIS.
2. BY EXECUTING/SIGNING THESE PLANS, THE LANDOWNER UNDERSTANDS THAT SINKHOLE AND SUBSURFACE SUBSIDENCE RISKS EXIST FOR THE PROPOSED STORMWATER MANAGEMENT SYSTEMS AS DESIGNED TO ACCOMODATE THE PROPOSED IMPROVEMENTS. THE LANDOWNER ASSUMES ALL RESPONSIBILITY FOR ANY ADVERSE CONDITIONS THAT MAY DEVELOP AS A RESULT OF STORMWATER SYSTEMS (INCLUDING INFILTRATION SYSTEMS) IN A CARBONATE GEOLOGY AREA. THE STORMWATER MANAGEMENT SYSTEMS SHALL BE MONITORED FOR PROPER PERFORMANCE AND A GEOTECHNICAL PROFESSIONAL SHALL BE CONSULTED FOR ANY ADVERSE SITUATIONS THAT MAY DEVELOP.
3. THE DESIGN AND LOCATION OF THE STORMWATER SYSTEMS HAVE INCORPORATED PROVISIONS TO MINIMIZE THE POTENTIAL FOR SINKHOLES AND SUBSURFACE SUBSIDENCE. HOWEVER BASED UPON DOCUMENTED SUB SURFACE CONDITIONS AND THE INHERENT RISK OF INFILTRATION IN CARBONATE GEOLOGY, THE CURRENT AND FUTURE LANDOWNER(S) ASSUMES ALL RESPONSIBILITY FOR ANY ADVERSE CONDITIONS THAT MAY DEVELOP AS A RESULT OF DEVELOPING THE INDIVIDUAL LOT(S) AND INSTALLING STORMWATER SYSTEMS IN A CARBONATE GEOLOGY AREA SUCH AS SINKHOLES, SUB-SURFACE SUBSIDENCE, AND ASSOCIATED PROPERTY DAMAGE.
4. THE CURRENT LANDOWNER OF RECORD ASSUMES THE RESPONSIBILITY AND MEANS OF INFORMING ALL SUBSEQUENT PURCHASERS OF PROPOSED LOTS CREATED BY THIS PLAN OF THE INHERENT RISKS OF CARBONATE GEOLOGY AND STORMWATER MANAGEMENT FACILITIES ON THE LOTS AND THAT THE INDIVIDUAL LANDOWNER(S) ASSUMES ALL RESPONSIBILITY FOR ANY ADVERSE CONDITIONS THAT MAY DEVELOP.
5. THE STORMWATER SYSTEMS SHALL BE MONITORED FOR PROPER PERFORMANCE FOLLOWING CONSTRUCTION AND SIGNS OF KARST ACTIVITY.
6. SURFACE WATER IS NOT RECOMMENDED TO COLLECT OR POOL IN LOW LYING AREAS OF THE SITE FRO EXTENDED PERIODS OF TIME AND SHOULD BE DIRECTED TO APPROPRIATE STORMWATER CHANNELS. EXPEDITIOUS BACKFILLING OR GRADING OF LOW-LYING AREAS WILL ALSO HELP MINIMIZE THE POTENTIAL DEVELOPMENT OF SINKHOLES.
7. THE EXTENT OF EXCAVATIONS SHOULD BE KEPT TO A MINIMUM AND THE INFLUX OF SURFACE WATER INTO EXCAVATIONS SHOULD BE MINIMIZED. THE POTENTIAL FOR SINKHOLE DEVELOPMENT GENERALLY INCREASES AS THE BEDROCK SURFACE IS ENCOUNTERED. THEREFORE, THE PROLONGED EXPOSURE OF THE BEDROCK SURFACE SHOULD ALSO BE MINIMIZED.
8. ALL STORM SEWER CONVEYANCE LINES SHOULD BE CONSTRUCTED AS "WATER TIGHT" JOINTS.
9. POSITIVE DRAINAGE AWAY FROM STRUCTURES SHOULD ALWAYS BE MAINTAINED. ROOF DRAINS SHOULD ALSO BE DIRECTED AWAY FROM STRUCTURES AND INTO DESIGNATED STORMWATER CHANNELS.
10. UNPAVED AREAS, SWALES OR SURFACE BASINS SHOULD BE MINIMIZED ADJACENT TO BUILDING/FOUNDATION AREAS.
11. SINKHOLES MAY OCCUR DURING CONSTRUCTION, AND SPECIFICALLY DURING AND SHORTLY FOLLOWING MASS GRADING OF THE PROJECT SITE. ALL SINKHOLES AND UNSTABLE SOIL CONDITIONS SHOULD BE REVIEWED BY KLEINFELDER.
12. CONTRACTOR SHALL BECOME FAMILIAR WITH ALL KLEINFELDER RECOMMENDATIONS IN THE "STORMWATER INFILTRATION AND CARBONATE ASSESSMENT REPORT, MCCASKEY HIGH SCHOOL STADIUM RENOVATIONS, LAST REVISED"

CONTRACTOR NOTES:

1. THE CONTRACTOR SHALL INSPECT THE SITE AND VERIFY EXISTING CONDITIONS, DIMENSIONS AND ELEVATIONS PRIOR TO

PADEP GENERAL NPDES PERMIT REQUIREMENTS

(NOTE: SEE APPROVED & ISSUED PADEP NPDES PERMIT FOR FULL AND COMPLETE REQUIREMENTS)

PART A - EFFLUENT LIMITATIONS, MONITORING, AND REPORTING REQUIREMENTS

1. EFFLUENT LIMITATIONS

a. BMPs

EXCEPT AS REQUIRED BY 25 PA. CODE §102.11(C), THIS PERMIT ESTABLISHES NARRATIVE PERFORMANCE BASED EFFLUENT LIMITATIONS IN THE FORM OF BMPs IDENTIFIED IN E&S PLANS, PCSM PLANS, AND PPC PLANS, WHICH CONTROL THE VOLUME, RATE, AND QUALITY OF STORMWATER RUNOFF AND ASSOCIATED POLLUTANTS FROM BEING DISCHARGED INTO SURFACE WATERS, AND WHICH REPLICATE PRECONSTRUCTION INFILTRATION AND RUNOFF CONDITIONS TO THE MAXIMUM EXTENT PRACTICABLE. SECTION 102.11(C) INCORPORATES BY REFERENCE FEDERAL EFFLUENT LIMITATION GUIDELINES IN 40 CFR PART 450 (RELATING TO THE CONSTRUCTION AND DEVELOPMENT POINT SOURCE CATEGORY).

b. APPLICABLE EFFLUENT LIMITATIONS

ACTIVITIES COVERED UNDER THIS PERMIT MUST COMPLY WITH APPLICABLE EFFLUENT LIMITATIONS ESTABLISHED IN 25 PA. CODE CHAPTERS 91, 92A, 93, 96, 102, AND 105 AND ANY APPLICABLE FEDERAL LAW OR REGULATION, INCLUDING THE EFFLUENT GUIDELINES FOR CONSTRUCTION AT 40 CFR PART 450.

c. WATER QUALITY BASED EFFLUENT LIMITATIONS

WATER QUALITY BASED EFFLUENT LIMITATIONS ARE APPLICABLE TO ACTIVITIES CONDUCTED UNDER THIS PERMIT WHEN REQUIRED UNDER APPLICABLE STATE AND FEDERAL LAW OR REGULATION TO ENSURE THAT THE WATER QUALITY STANDARDS OF THE RECEIVING WATER ARE ATTAINED. ACTIVITIES CONDUCTED UNDER THIS PERMIT SHALL NOT RESULT IN A VIOLATION OF SUCH WATER QUALITY STANDARDS.

2. MONITORING, INSPECTION, AND REPORTING REQUIREMENTS

a. VISUAL INSPECTIONS

THE PERMITTEE AND CO-PERMITTEE(S) MUST ENSURE THAT VISUAL SITE INSPECTIONS ARE CONDUCTED AND DOCUMENTED WEEKLY, AND WITHIN 24 HOURS AFTER EACH MEASURABLE STORMWATER EVENT THROUGHOUT THE DURATION OF CONSTRUCTION AND UNTIL THE RECEIPT AND ACKNOWLEDGEMENT OF THE NOT BY THE DEPARTMENT OR AUTHORIZED CONSERVATION DISTRICT. THE VISUAL SITE INSPECTIONS AND REPORTS SHALL BE COMPLETED ON A FORM DEVELOPED BY THE DEPARTMENT, AND CONDUCTED BY QUALIFIED PERSONNEL, TRAINED AND EXPERIENCED IN EROSION AND SEDIMENT CONTROL, TO ASCERTAIN THAT E&S, PCSM AND PPC BMPS ARE PROPERLY CONSTRUCTED AND MAINTAINED TO EFFECTIVELY MINIMIZE POLLUTION TO THE WATERS OF THIS COMMONWEALTH. A WRITTEN REPORT OF EACH INSPECTION SHALL BE KEPT AND INCLUDE AT A MINIMUM:

(1) A SUMMARY OF SITE CONDITIONS, E&S AND PCSM BMPS, IMPLEMENTATION AND MAINTENANCE AND COMPLIANCE ACTIONS; AND

(2) THE DATE, TIME, NAME AND SIGNATURE OF THE PERSON CONDUCTING THE INSPECTION.

b. LICENSED PROFESSIONAL OVERSIGHT OF CRITICAL STAGES

A LICENSED PROFESSIONAL OR A DESIGNEE SHALL BE PRESENT ONSITE AND BE RESPONSIBLE FOR OVERSIGHT OF CRITICAL STAGES OF IMPLEMENTATION OF THE APPROVED PCSM PLAN. THE CRITICAL STAGES MAY INCLUDE THE INSTALLATION OF UNDERGROUND TREATMENT OR STORAGE BMPS, STRUCTURALLY ENGINEERED BMPS, OR OTHER BMPS AS DEEMED APPROPRIATE BY THE DEPARTMENT OR AUTHORIZED CONSERVATION DISTRICT.

c. NONCOMPLIANCE REPORTING

WHERE E&S, PCSM OR PPC BMPS ARE FOUND TO BE INOPERATIVE OR INEFFECTIVE DURING AN INSPECTION OR ANY OTHER TIME THE PERMITTEE BECOMES AWARE OF ANY INCIDENT CAUSING OR THREATENING POLLUTION AS DESCRIBED IN 25 PA. CODE § 91.33 (RELATING TO INCIDENTS CAUSING OR THREATENING POLLUTION), AS REQUIRED BY 25 PA. CODE § 92A.41(B) (RELATING TO CONDITIONS APPLICABLE TO ALL PERMITS), THE PERMITTEE AND CO-PERMITTEE(S) SHALL, WITHIN 24 HOURS, CONTACT THE DEPARTMENT OR AUTHORIZED CONSERVATION DISTRICT, BY PHONE OR PERSONAL CONTACT, FOLLOWED BY THE SUBMISSION OF A WRITTEN REPORT WITHIN FIVE (5) DAYS OF THE INITIAL CONTACT. NONCOMPLIANCE REPORTS SHALL INCLUDE THE FOLLOWING INFORMATION:

(1) ANY CONDITION ON THE PROJECT SITE WHICH MAY ENDANGER PUBLIC HEALTH, SAFETY, OR THE ENVIRONMENT, OR INVOLVE INCIDENTS WHICH CAUSE OR THREATEN POLLUTION,

(2) THE PERIOD OF NONCOMPLIANCE, INCLUDING EXACT DATES AND TIMES AND/OR ANTICIPATED TIME WHEN THE ACTIVITY WILL RETURN TO COMPLIANCE;

(3) STEPS BEING TAKEN TO REDUCE, ELIMINATE, AND PREVENT RECURRENCE OF THE NONCOMPLIANCE; AND

(4) THE DATE OR SCHEDULE OF DATES, AND IDENTIFYING REMEDIES FOR CORRECTING NONCOMPLIANCE CONDITIONS.

d. SUPPLEMENTAL MONITORING

THE DEPARTMENT OR AUTHORIZED CONSERVATION DISTRICT MAY REQUIRE ADDITIONAL MONITORING WHERE AN INCREASED RISK OF POTENTIAL WATER POLLUTION IS PRESENT, OR WATER POLLUTION IS SUSPECTED TO BE OCCURRING FROM A CONSTRUCTION ACTIVITY SUBJECT TO THIS GENERAL PERMIT, OR FOR ANY REASON IN ACCORDANCE WITH 25 PA. CODE § 92A.61 (RELATING TO MONITORING). THE PERMITTEE OR CO-PERMITTEE SHALL COMMENCE SUCH MONITORING UPON NOTIFICATION FROM THE DEPARTMENT OR AUTHORIZED CONSERVATION DISTRICT.

e. AVAILABILITY OF REPORTS

EXCEPT FOR DATA DETERMINED TO BE CONFIDENTIAL UNDER SECTION 607 OF THE CLEAN STREAMS LAW, ALL REPORTS AND OTHER INFORMATION PREPARED IN ACCORDANCE WITH THE TERMS OF THIS PERMIT SHALL BE AVAILABLE FOR PUBLIC INSPECTION AT THE APPROPRIATE DEPARTMENT REGIONAL OFFICE OR AUTHORIZED CONSERVATION DISTRICT.

3. RECORD KEEPING

a. RETENTION OF RECORDS

THE PERMITTEE AND CO-PERMITTEE(S) SHALL RETAIN RECORDS OF ALL MONITORING INFORMATION INCLUDING COPIES OF ALL MONITORING AND INSPECTION REPORTS REQUIRED BY THIS PERMIT, ALL MONITORING INFORMATION (INCLUDING SITE LOG BOOK, CALIBRATION AND MAINTENANCE RECORDS) AND RECORDS OF DATA USED TO COMPLETE THE NOI FOR THIS PERMIT, FOR A PERIOD OF THREE YEARS FROM THE DATE OF THE TERMINATION OF COVERAGE UNDER THIS PERMIT AS REQUIRED BY 25 PA. CODE § 92A.61(F)(2). THIS PERIOD OF RETENTION MUST BE EXTENDED DURING THE COURSE OF ANY UNRESOLVED COMPLIANCE, ENFORCEMENT, OR LITIGATION OR WHEN REQUESTED BY THE DEPARTMENT OR AUTHORIZED CONSERVATION DISTRICT.

b. REPORTING OF MONITORING RESULTS

VISUAL INSPECTION MONITORING RESULTS SHALL BE SUBMITTED TO THE DEPARTMENT OR AUTHORIZED CONSERVATION DISTRICT UPON REQUEST.

4. DISCHARGES CONSISTENT WITH TERMS AND CONDITIONS OF THE PERMIT

ALL DISCHARGES AUTHORIZED BY THIS NPDES PERMIT SHALL BE CONSISTENT WITH THE TERMS AND CONDITIONS OF THE PERMIT.

PART B - STANDARD CONDITIONS

1. MANAGEMENT REQUIREMENTS

a. PERMIT MODIFICATION, TERMINATION, OR REVOCATION AND REISSUANCE

(1) THE GENERAL PERMIT WILL EXPIRE FIVE (5) YEARS FROM THE DATE OF ITS ISSUANCE. THE AUTHORIZATION PERIOD FOR THE PERMIT WILL BE FIVE (5) YEARS FOR ALL PERMITS FROM THE DATE OF AUTHORIZATION. THE DEPARTMENT WILL PUBLISH A NOTICE IN THE PENNSYLVANIA BULLETIN OF THE DRAFT, RENEWED, OR REISSUED GENERAL PERMIT OR ANY AMENDMENTS TO THIS GENERAL PERMIT, AND AFTER A COMMENT PERIOD, NOTICE OF THE FINAL, RENEWED, REISSUED OR AMENDED GENERAL PERMIT WILL BE PUBLISHED IN THE PENNSYLVANIA BULLETIN. ANY PERSON WITH AN UNEXPIRED APPROVAL OF COVERAGE UNDER THE GENERAL PERMIT, INCLUDING COVERAGE EXTENDED PURSUANT TO SECTION 9(C) OF THIS PERMIT SHALL BE RESPONSIBLE FOR COMPLYING WITH THE FINAL RENEWED, REISSUED OR AMENDED GENERAL PERMIT. SUCH PERSONS SHALL BE COVERED BY THE GENERAL PERMIT EVEN IF THE DISCHARGER HAS NOT SUBMITTED A SEPARATE NOI TO BE COVERED BY SUCH FINAL RENEWED, REISSUED OR AMENDED GENERAL PERMIT. SUCH PERSON MAY REQUEST COVERAGE UNDER AN INDIVIDUAL PERMIT. SEE 40 CFR § 122.28(B)(2)(VI); 25 PA. CODE § 92A.54(C) AND (D) (RELATING TO GENERAL PERMITS).

(2) THIS PERMIT MAY BE MODIFIED, SUSPENDED, REVOKED, REISSUED, OR TERMINATED DURING ITS TERM FOR ANY OF THE CAUSES SPECIFIED IN 25 PA. CODE CHAPTERS 92A AND 102 (RELATING TO EROSION AND SEDIMENT CONTROL), OR TO REQUIRE COMPLIANCE WITH UPDATED EFFLUENT LIMITATION GUIDELINES, WATER QUALITY STANDARDS, IMPAIRED WATER LISTINGS, OR NEWLY APPROVED TMDLS.

(3) THE DEPARTMENT MAY MODIFY, REVOKE, SUSPEND, OR TERMINATE PREVIOUSLY ISSUED COVERAGE UNDER THIS GENERAL NPDES PERMIT AND REQUIRE THE STORMWATER DISCHARGER TO APPLY FOR AND OBTAIN AN INDIVIDUAL NPDES PERMIT IN ACCORDANCE WITH 25 PA. CODE CHAPTERS 92A AND 102.

(4) THE FILING OF A REQUEST BY THE PERMITTEE OR CO-PERMITTEE FOR A PERMIT OR COVERAGE MODIFICATION, REVOCATION, REISSUANCE, OR TERMINATION, OR A NOTIFICATION OF PLANNED CHANGES OR ANTICIPATED NONCOMPLIANCE, DOES NOT ELIMINATE ANY EXISTING PERMIT CONDITIONS.

(5) PERMIT MODIFICATION OR REVOCATION WILL BE CONDUCTED ACCORDING TO 25 PA. CODE CHAPTERS 92A AND 102.

b. DUTY TO PROVIDE INFORMATION

(1) THE PERMITTEE OR CO-PERMITTEE(S) SHALL FURNISH TO THE DEPARTMENT OR AUTHORIZED CONSERVATION DISTRICT WITHIN THIRTY (30) DAYS OF THE DATE OF REQUEST, ANY INFORMATION THAT THE DEPARTMENT OR AUTHORIZED CONSERVATION DISTRICT MAY REQUEST TO DETERMINE WHETHER CAUSE EXISTS FOR MODIFYING, REVOKING, REISSUING, OR TERMINATING THIS PERMIT OR COVERAGE APPROVED UNDER THIS PERMIT OR TO DETERMINE COMPLIANCE WITH THIS PERMIT.

(2) THE PERMITTEE OR CO-PERMITTEE SHALL FURNISH, UPON REQUEST, TO THE DEPARTMENT, EPA OR AUTHORIZED CONSERVATION DISTRICT, COPIES OF RECORDS REQUIRED TO BE KEPT BY THIS PERMIT.

(3) WHEN THE PERMITTEE OR CO-PERMITTEE BECOMES AWARE THAT THEY FAILED TO SUBMIT ANY RELEVANT FACTS OR SUBMITTED INCORRECT INFORMATION IN THE NOI, E&S PLAN, PCSM PLAN, OR PPC PLAN OR IN ANY OTHER REPORT TO THE DEPARTMENT OR AUTHORIZED CONSERVATION DISTRICT, THE PERMITTEE OR CO-PERMITTEE SHALL WITHIN 24 HOURS OF BECOMING AWARE OF THE DEFICIENCY SUBMIT OR CORRECT SUCH FACTS OR INFORMATION.

(4) THE PERMITTEE OR CO-PERMITTEE SHALL GIVE SEVEN (7) CALENDAR DAYS ADVANCE NOTICE TO THE DEPARTMENT OR AUTHORIZED CONSERVATION DISTRICT OF ANY PLANNED PHYSICAL ALTERATIONS OR ADDITIONS TO THE PERMITTED FACILITY WHICH COULD, IN ANY WAY, SUBSTANTIALLY AFFECT THE QUALITY AND/OR QUANTITY OF STORMWATER DISCHARGED FROM THE ACTIVITY.

c. SIGNATORY REQUIREMENTS

DOCUMENTS REQUIRED, SUBMITTED, OR MAINTAINED UNDER THIS PERMIT SHALL BE SIGNED IN ACCORDANCE WITH THE FOLLOWING:

(1) NOTICES OF INTENT, TRANSFEREE/CO-PERMITTEE FORM, AND NOTICES OF TERMINATION.

(a) CORPORATIONS: (1) A PRESIDENT, SECRETARY, TREASURER, OR VICE-PRESIDENT OF THE CORPORATION IN CHARGE OF A PRINCIPAL BUSINESS FUNCTION, OR ANY OTHER PERSON WHO PERFORMS SIMILAR POLICY OR DECISION- MAKING FUNCTIONS FOR THE CORPORATION; OR (2) THE MANAGER OF ONE OR MORE MANUFACTURING, PRODUCTION, OR OPERATING FACILITIES, IF AUTHORITY TO SIGN DOCUMENTS HAS BEEN ASSIGNED OR DELEGATED TO THE MANAGER IN ACCORDANCE WITH CORPORATE PROCEDURES;

(b) PARTNERSHIPS OR SOLE PROPRIETORSHIPS: A GENERAL PARTNER OR THE PROPRIETOR, RESPECTIVELY; OR

(c) MUNICIPALITIES, STATE, FEDERAL, OR OTHER PUBLIC AGENCIES: EITHER A PRINCIPAL EXECUTIVE OFFICER OR RANKING ELECTED OFFICIAL SUCH AS: (1) THE CHIEF EXECUTIVE OFFICER OR SECRETARY OF THE AGENCY, OR (2) A SENIOR EXECUTIVE OFFICER HAVING RESPONSIBILITY FOR THE OVERALL OPERATIONS OF A PRINCIPAL GEOGRAPHIC UNIT OF THE AGENCY (E.G., REGIONAL ADMINISTRATORS OF EPA).

(2) ALL REPORTS, PLANS, DOCUMENTS, AND OTHER INFORMATION REQUIRED BY THE PERMIT OR REQUESTED BY THE DEPARTMENT OR AUTHORIZED CONSERVATION DISTRICT SHALL BE SIGNED BY A DULY AUTHORIZED REPRESENTATIVE OF THE PERMITTEE.

(3) IF THERE IS A CHANGE IN THE DULY AUTHORIZED REPRESENTATIVE OF THE PERMITTEE OR CO-PERMITTEE, RESPECTIVELY, THE PERMITTEE OR CO-PERMITTEE SHALL NOTIFY THE DEPARTMENT OR AUTHORIZED CONSERVATION DISTRICT WITHIN THIRTY (30) DAYS OF THE CHANGE.

d. TRANSFER OF OWNERSHIP OR CONTROL

(1) THIS PERMIT IS NOT TRANSFERABLE TO ANY PERSON EXCEPT AFTER NOTICE AND ACKNOWLEDGMENT BY THE DEPARTMENT OR AUTHORIZED CONSERVATION DISTRICT.

(a) IN THE EVENT OF ANY PENDING CHANGE IN CONTROL OR OWNERSHIP OF FACILITIES FROM WHICH THE AUTHORIZED DISCHARGES EMANATE, THE PERMITTEE OR CO-PERMITTEE SHALL NOTIFY THE DEPARTMENT OR AUTHORIZED CONSERVATION DISTRICT USING THE FORM ENTITLED "TRANSFEREE/CO-PERMITTEE APPLICATION" OF SUCH PENDING CHANGE AT LEAST THIRTY (30) DAYS PRIOR TO THE CHANGE IN OWNERSHIP OR CONTROL.

(b) THE TRANSFEREE/CO-PERMITTEE APPLICATION FORM SHALL BE ACCOMPANIED BY A WRITTEN AGREEMENT BETWEEN THE EXISTING PERMITTEE AND THE NEW OWNER OR OPERATOR STATING THAT THE EXISTING PERMITTEE SHALL BE LIABLE FOR VIOLATIONS OF THE PERMIT UP TO AND UNTIL THE DATE OF COVERAGE TRANSFER AND THAT THE NEW OWNER OR OPERATOR SHALL BE JOINTLY AND INDIVIDUALLY LIABLE FOR PERMIT VIOLATIONS UNDER THE PERMIT FROM THAT DATE ON.

(c) AFTER RECEIPT OF AN ADMINISTRATIVELY COMPLETE AND ACCEPTABLE TRANSFEREE/CO-PERMITTEE APPLICATION FORM, THE DEPARTMENT OR AUTHORIZED CONSERVATION DISTRICT SHALL NOTIFY THE EXISTING PERMITTEE AND THE NEW OWNER OR OPERATOR OF ITS DECISION CONCERNING APPROVAL OF THE TRANSFER OF OWNERSHIP OR CONTROL. SUCH REQUESTS SHALL BE DEEMED APPROVED UNLESS THE DEPARTMENT OR AUTHORIZED CONSERVATION DISTRICT NOTIFIES THE APPLICANT OTHERWISE WITHIN THIRTY (30) DAYS.

(2) THE DEPARTMENT OR AUTHORIZED CONSERVATION DISTRICT MAY REQUIRE THE NEW OWNER OR OPERATOR TO APPLY FOR AND OBTAIN AN INDIVIDUAL NPDES PERMIT.

(3) FOR PURPOSES OF THIS PERMIT, OPERATORS SHALL INCLUDE GENERAL CONTRACTORS. IF PRIOR TO CONSTRUCTION ACTIVITIES, THE OWNER IS THE PERMITTEE AND AN OPERATOR/GENERAL CONTRACTOR IS LATER IDENTIFIED TO BECOME A CO-PERMITTEE, THE OWNER SHALL:

(a) NOTIFY THE DEPARTMENT OR AUTHORIZED CONSERVATION DISTRICT BY SUBMITTING AN ADMINISTRATIVELY COMPLETE AND ACCEPTABLE TRANSFEREE/CO-PERMITTEE APPLICATION FORM; AND

(b) ENSURE THAT MONITORING REPORTS AND ANY OTHER INFORMATION REQUESTED UNDER THIS PERMIT SHALL REFLECT ALL CHANGES TO THE PERMITTEE AND THE CO-PERMITTEE NAME.

(4) AFTER RECEIPT OF THE DOCUMENTATION DESCRIBED IN (3) ABOVE, THE PERMIT WILL BE CONSIDERED MODIFIED BY THE DEPARTMENT OR AUTHORIZED CONSERVATION DISTRICT. FOR THE PURPOSES OF THIS PERMIT, THIS MODIFICATION IS CONSIDERED TO BE A MINOR PERMIT MODIFICATION.

(5) UPON AUTHORIZATION OF A CHANGE IN OWNERSHIP OR CONTROL, THE EXISTING PERMITTEE SHALL PROVIDE A COPY OF THE PERMIT AND APPROVED PLANS TO THE NEW OWNER AND/OR CO-PERMITTEE.

e. REMOVED SUBSTANCES

SOLIDS, SEDIMENTS, AND OTHER POLLUTANTS REMOVED IN THE COURSE OF TREATMENT OR CONTROL OF STORMWATER SHALL BE DISPOSED IN ACCORDANCE WITH FEDERAL AND STATE LAW AND REGULATIONS, IN ORDER TO PREVENT ANY POLLUTANT IN SUCH MATERIALS FROM ADVERSELY AFFECTING THE ENVIRONMENT.

f. BMP CONSTRUCTION, OPERATION AND MAINTENANCE

THE PERMITTEE AND CO-PERMITTEE(S) ARE RESPONSIBLE FOR THE DESIGN, INSTALLATION, OPERATION, AND MAINTENANCE OF THE BMPS IDENTIFIED IN THE E&S PLAN, PCSM PLAN, AND PPC PLAN.

g. ADVERSE IMPACT

THE PERMITTEE AND CO-PERMITTEE(S) SHALL TAKE ALL REASONABLE STEPS TO PREVENT, MINIMIZE, OR CEASE ANY DISCHARGE IN VIOLATION OF THIS PERMIT.

h. REDUCTION, LOSS, OR FAILURE OF BMP

UPON REDUCTION, LOSS, OR FAILURE OF ANY BMP, THE PERMITTEE AND CO-PERMITTEE SHALL TAKE IMMEDIATE ACTION TO RESTORE, REPAIR, OR REPLACE THE BMP OR PROVIDE AN ALTERNATIVE METHOD OF TREATMENT. SUCH RESTORED BMP OR ALTERNATIVE TREATMENT SHALL BE AT LEAST AS EFFECTIVE AS THE ORIGINAL BMP WHEN PROPERLY INSTALLED. THESE ACTIONS SHOULD BE UNDERTAKEN TO ENSURE THAT THERE ARE NO POLLUTANTS OR POLLUTION DISCHARGED TO THE WATERS OF THE COMMONWEALTH. THIS REQUIREMENT IS APPLICABLE IN SITUATIONS WHERE THE BMP IS RENDERED INEFFECTIVE, WHETHER THE CAUSE OR SOURCE OF THE REDUCTION, LOSS OR FAILURE IS WITHIN OR BEYOND THE CONTROL OF THE PERMITTEE OR CO-PERMITTEE.

2. COMPLIANCE RESPONSIBILITIES

a. DUTY TO COMPLY

THE PERMITTEE AND CO-PERMITTEE MUST COMPLY WITH ALL TERMS AND CONDITIONS OF THIS GENERAL PERMIT. ANY PERMIT NONCOMPLIANCE CONSTITUTES A VIOLATION OF THE PENNSYLVANIA CLEAN STREAMS LAW AND THE FEDERAL CLEAN WATER ACT AND IS GROUNDS FOR ENFORCEMENT ACTION; FOR PERMIT TERMINATION, REVOCATION, REISSUANCE, OR MODIFICATION; OR FOR DENIAL OF A PERMIT OR PERMIT RENEWAL.

b. PENALTIES FOR VIOLATIONS OF PERMIT CONDITIONS

ANY PERSON WHO VIOLATES A PERMIT CONDITION, FAILS TO TAKE CORRECTIVE ACTION TO ABATE VIOLATIONS OR FALSIFIES REPORT OR OTHER DOCUMENTS MAY BE SUBJECT TO CRIMINAL AND/OR CIVIL PENALTIES OR OTHER APPROPRIATE ACTION FOR VIOLATIONS OF THE TERMS AND CONDITIONS OF THIS GENERAL PERMIT UNDER SECTIONS 602 AND 605 OF THE CLEAN STREAMS LAW (35 P.S. § 691.602 AND 691.605), AND UNDER THE CLEAN WATER ACT AS SPECIFIED IN 40 CFR § 122.41(A) (2) AND (3), WHICH ARE INCORPORATED BY REFERENCE.

c. NEED TO HALT OR REDUCE ACTIVITY NOT A DEFENSE

THE PERMITTEE AND/OR CO-PERMITTEE MAY NOT USE AS A DEFENSE IN AN ENFORCEMENT ACTION THAT IT WOULD HAVE BEEN NECESSARY TO HALT OR REDUCE THE PERMITTED ACTIVITY TO MAINTAIN COMPLIANCE WITH THE CONDITIONS OF THIS PERMIT.

d. PENALTIES AND LIABILITY

NOTHING IN THIS PERMIT SHALL BE CONSTRUED TO PRECLUDE THE INSTITUTION OF ANY LEGAL ACTION OR RELIEVE THE PERMITTEE OR CO-PERMITTEE FROM ANY RESPONSIBILITIES, LIABILITIES, OR PENALTIES TO WHICH THE PERMITTEE IS OR MAY BE SUBJECT UNDER SECTION 311 OF THE CLEAN WATER ACT (33 U.S.C. §1321) OR SECTION 106 OF COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION, AND LIABILITY ACT (ACT 42 U.S.C. § 9601).

e. PROPERTY RIGHTS

THIS PERMIT DOES NOT CONVEY ANY PROPERTY RIGHTS OF ANY SORT, NOR ANY EXCLUSIVE PRIVILEGES, NOR DOES IT AUTHORIZE ANY INJURY TO PRIVATE PROPERTY NOR ANY INVASION OF PERSONAL RIGHTS, NOR ANY INFRINGEMENT OF FEDERAL, STATE, OR LOCAL LAWS OR REGULATIONS.

f. SEVERABILITY

THE PROVISIONS OF THIS PERMIT ARE SEVERABLE; AND IF ANY PROVISION OF THIS PERMIT, OR THE APPLICATION OF ANY PROVISION OF THIS PERMIT TO ANY CIRCUMSTANCE, IS HELD INVALID, THE APPLICATION OF SUCH PROVISION TO OTHER CIRCUMSTANCES AND THE REMAINDER OF THIS PERMIT SHALL NOT BE AFFECTED THEREBY.

g. OTHER LAWS

NOTHING IN THIS PERMIT SHALL BE CONSTRUED TO PRECLUDE THE INSTITUTION OF ANY LEGAL ACTION OR RELIEVE THE PERMITTEE OR CO-PERMITTEE FROM ANY RESPONSIBILITIES, LIABILITIES, OR PENALTIES ESTABLISHED PURSUANT TO ANY APPLICABLE STATE LAW OR REGULATION UNDER AUTHORITY PRESERVED BY SECTION 510 OF THE CLEAN WATER ACT.

h. RIGHT OF ENTRY

PURSUANT TO SECTIONS 5(B) AND 305 OF THE PENNSYLVANIA CLEAN STREAMS LAW (35 P.S. §§691.5(B) AND 691.305), 25 PA. CODE CHAPTER 92A, AND SWITA OF THE ADMINISTRATIVE CODE OF 1929, THE PERMITTEE AND CO-PERMITTEE SHALL ALLOW THE DIRECTOR OF THE DEPARTMENT, THE EPA REGIONAL ADMINISTRATOR, AND/OR AN AUTHORIZED REPRESENTATIVE OF EPA, OR THE DEPARTMENT, CONSERVATION DISTRICT OR, IN THE CASE OF A FACILITY WHICH DISCHARGES TO A MUNICIPAL SEPARATE STORM SEWER, AN AUTHORIZED REPRESENTATIVE OF THE MUNICIPAL OPERATOR OR THE SEPARATE STORM SEWER RECEIVING THE DISCHARGE, UPON THE PRESENTATION OF CREDENTIALS AND OTHER DOCUMENTS, AS MAY BE REQUIRED BY LAW, TO:

(1) ENTER UPON THE PERMITTEE'S OR CO-PERMITTEE'S PREMISES WHERE A REGULATED FACILITY OR ACTIVITY IS LOCATED OR CONDUCTED OR WHERE RECORDS MUST BE KEPT UNDER THE CONDITIONS OF THIS PERMIT;

(2) HAVE ACCESS TO AND COPY, AT REASONABLE TIMES, ANY RECORDS THAT MUST BE KEPT UNDER THE TERMS AND CONDITIONS OF THIS PERMIT;

(3) INSPECT ANY FACILITIES OR EQUIPMENT (INCLUDING MONITORING AND CONTROL EQUIPMENT); AND

(4) OBSERVE OR SAMPLE ANY DISCHARGE OF STORMWATER.

i. AVAILABILITY OF REPORTS

EXCEPT FOR DATA DETERMINED TO BE CONFIDENTIAL UNDER SECTION 607 OF THE CLEAN STREAMS LAW (35 P.S. §691.607), ALL REPORTS PREPARED IN ACCORDANCE WITH THE TERMS OF THIS PERMIT SHALL BE AVAILABLE FOR PUBLIC INSPECTION AT THE OFFICES OF THE DEPARTMENT OR AUTHORIZED CONSERVATION DISTRICT. AS REQUIRED BY THE CLEAN WATER ACT, THE CLEAN STREAMS LAW, AND THE DEPARTMENT'S REGULATIONS AT 25 PA. CODE § 92A.9 (RELATING TO CONFIDENTIALITY OF INFORMATION), PERMIT APPLICATIONS, PERMITS, AND OTHER DOCUMENTS RELATED TO THIS PERMIT SHALL NOT BE CONSIDERED CONFIDENTIAL.

j. PENALTIES FOR FALSIFICATION OF REPORTS

SECTION 309(C)(4) OF THE CLEAN WATER ACT PROVIDES THAT ANY PERSON WHO KNOWINGLY MAKES ANY FALSE MATERIAL STATEMENT, REPRESENTATION, OR CERTIFICATION IN ANY RECORD OR OTHER DOCUMENT SUBMITTED OR REQUIRED TO BE MAINTAINED UNDER THIS PERMIT, INCLUDING REPORTS OF COMPLIANCE OR NONCOMPLIANCE SHALL, UPON CONVICTION, BE PUNISHED BY A FINE OF NOT MORE THAN $10,000 OR BY IMPRISONMENT FOR NOT MORE THAN TWO YEARS OR BY BOTH. IN ADDITION, CRIMINAL SANCTIONS ARE SET FORTH FOR FALSE SWEARING AND UNSWORN FALSIFICATION AT 18 PA.C.S. §§ 4903-4904.

PART C - OTHER CONDITIONS

1. PROHIBITION OF NONSTORMWATER DISCHARGES

ALL DISCHARGES COVERED BY THIS PERMIT SHALL BE COMPOSED ENTIRELY OF STORMWATER. DISCHARGES OF MATERIAL OTHER THAN STORMWATER THAT MUST BE IN COMPLIANCE, WHETHER REQUIRED WITH AN NPDES PERMIT (OTHER THAN THIS PERMIT) ISSUED FOR THE DISCHARGE. DISCHARGE OF SEWAGE OR INDUSTRIAL WASTE (OTHER THAN SEDIMENT UNDER THIS PERMIT) TO AN E&S BMP IS NOT PERMITTED.

THE PERMITTEE/CO-PERMITTEE MAY NOT DISCHARGE FLOATING MATERIALS, OIL, GREASE, SCUM, FOAM, SHEEN, AND SUBSTANCES WHICH PRODUCE ODOR, TASTE, OR TURBIDITY OR SETTLE TO FORM DEPOSITS IN CONCENTRATIONS OR AMOUNTS SUFFICIENT TO BE, OR CREATE A DANGER OF BEING, INIMICAL TO THE WATER USES TO BE PROTECTED OR HUMAN, ANIMAL, PLANT, OR AQUATIC LIFE.

2. EROSION AND SEDIMENT CONTROL PLANS

a. UNLESS OTHERWISE AUTHORIZED BY THE DEPARTMENT OR CONSERVATION DISTRICT AFTER CONSULTATION WITH THE DEPARTMENT, EARTH DISTURBANCE ACTIVITIES SHALL BE PLANNED AND IMPLEMENTED TO THE EXTENT PRACTICABLE IN ACCORDANCE WITH THE FOLLOWING:

(i) MINIMIZE THE EXTENT AND DURATION OF EARTH DISTURBANCE.

(ii) MAXIMIZE PROTECTION OF EXISTING DRAINAGE FEATURES AND VEGETATION.

(iii) MINIMIZE SOIL COMPACTION.

(iv) UTILIZE OTHER MEASURES OR CONTROLS THAT PREVENT OR MINIMIZE THE GENERATION OF INCREASED STORMWATER RUNOFF.

b. AN E&S PLAN SHALL BE PREPARED AND IMPLEMENTED IN ACCORDANCE WITH THE REQUIREMENTS OF 25 PA. CODE CHAPTER 102 AND BY A PERSON TRAINED AND EXPERIENCED IN EROSION AND SEDIMENT CONTROL METHODS AND TECHNIQUES APPLICABLE TO THE SIZE AND SCOPE OF THE PROJECT BEING DESIGNED. EACH E&S PLAN MUST BE SUBMITTED TO AND APPROVED BY THE DEPARTMENT OR AUTHORIZED CONSERVATION DISTRICT. THE E&S PLANS SHALL BE DESIGNED TO MINIMIZE THE POTENTIAL FOR ACCELERATED EROSION AND SEDIMENTATION IN ORDER TO PROTECT, MAINTAIN, RECLAIM, AND RESTORE WATER QUALITY AND EXISTING AND DESIGNATED USES. VARIOUS BMPS AND THEIR DESIGN STANDARDS ARE LISTED IN THE EROSION AND SEDIMENT POLLUTION CONTROL PROGRAM MANUAL, NO. 363-2134-008, AS AMENDED AND UPDATED. THE MANUAL IS AVAILABLE FROM THE DEPARTMENT OR AUTHORIZED CONSERVATION DISTRICT OR CAN BE DOWNLOADED FROM THE DEPARTMENT'S WEBSITE AT WWW.DEP.STATE.PA.US. E&S PLANS AND BMPS, AND REVISIONS THERETO, WHICH MEET THE REQUIREMENTS OF 25 PA. CODE CHAPTERS 93, 96 (RELATING TO WATER QUALITY STANDARDS IMPLEMENTATION), AND 102, ARE CONDITIONS OF THIS PERMIT AND ARE INCORPORATED BY REFERENCE.

c. E&S CONTROL PLANS REQUIRED UNDER THIS PERMIT ARE CONSIDERED REPORTS THAT SHALL BE AVAILABLE TO THE PUBLIC UNDER SECTION 607 OF THE CLEAN STREAMS LAW AND 25 PA. CODE CHAPTER 92A OF THE DEPARTMENT'S REGULATIONS. THE OWNER OR OPERATOR OF A FACILITY WITH STORMWATER DISCHARGES COVERED BY THIS PERMIT SHALL MAKE E&S PLANS AVAILABLE TO THE PUBLIC UPON REQUEST. E&S PLANS MUST BE MADE AVAILABLE AT THE SITE OF THE CONSTRUCTION ACTIVITY AT ALL TIMES.

d. THE APPROVED E&S PLAN, INCLUDING THE STAGING OF EARTH DISTURBANCE ACTIVITIES AND MAINTENANCE REQUIREMENTS, MUST BE FOLLOWED.

e. UPON THE INSTALLATION OR STABILIZATION OF ALL PERIMETER SEDIMENT CONTROL BMPS AND AT LEAST THREE (3) DAYS PRIOR TO PROCEEDING WITH THE BULK EARTH DISTURBANCE ACTIVITIES, THE PERMITTEE OR CO-PERMITTEE SHALL PROVIDE NOTIFICATION TO THE DEPARTMENT OR AUTHORIZED CONSERVATION DISTRICT.

f. THE E&S PLAN MUST BE CONSISTENT WITH THE ASSUMPTIONS AND REQUIREMENTS OF ANY ASSIGNED WASTELOAD ALLOCATIONS (WLAS) AS SET FORTH IN ANY APPLICABLE TOTAL MAXIMUM DAILY LOADS (TMDLS) ESTABLISHED FOR THE RECEIVING WATERS.

3. RECYCLING AND DISPOSAL OF BUILDING MATERIALS AND WASTES

ALL BUILDING MATERIALS AND WASTES MUST BE REMOVED FROM THE SITE AND RECYCLED OR DISPOSED IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA. CODE CH. 260A (RELATING TO HAZARDOUS WASTE MANAGEMENT SYSTEM: GENERAL); CH. 271 (RELATED TO MUNICIPAL WASTE MANAGEMENT SYSTEM - GENERAL PROVISIONS); AND CH.287 (RELATING TO RESIDUAL WASTE MANAGEMENT SYSTEM - GENERAL PROVISIONS). NO BUILDING MATERIAL OR WASTES OR UNUSED BUILDING MATERIALS SHALL BE BURNED, BURIED, DUMPED, OR DISCHARGED AT THE SITE.

4. PREPAREDNESS,

TEMPORARY CONTROL MEASURES

1. STABILIZED CONSTRUCTION ENTRANCE
   a. A STABILIZED PAD OF CRUSHED STONE (AASHTO NO. 1) SHALL BE LOCATED WHERE CONSTRUCTION TRAFFIC WILL BE ENTERING AND EXISTING THE SITE. THE STABILIZED CONSTRUCTION ENTRANCE IS USED TO REDUCE OR ELIMINATE THE TRACKING OR FLOWING OF SEDIMENT INTO THE EXISTING TRAVELWAYS AND STREETS BORDERING THE SITE.
   b. ROCK CONSTRUCTION ENTRANCE THICKNESS SHALL BE CONSTANTLY MAINTAINED TO THE SPECIFIED DIMENSIONS BY ADDING ROCK AS NEEDED. A STOCKPILE OF ROCK MATERIAL SHALL BE MAINTAINED ON THE SITE FOR THIS PURPOSE. AT THE END OF EACH CONSTRUCTION DAY, ALL SEDIMENT DEPOSITED ON PUBLIC ROADWAYS SHALL BE REMOVED AND RETURNED TO THE CONSTRUCTION SITE. WATER SHALL NOT BE USED TO REMOVE SEDIMENT.

2. TOPSOIL STOCKPILE
   a. A STOCKPILE SHALL BE USED TO CONTAIN ALL STRIPPED TOPSOIL IN A LIMITED AREA IN ORDER TO KEEP DISTURBANCE TO A MINIMUM.
   b. STOCKPILES SHALL BE IMMEDIATELY STABILIZED WITH A TEMPORARY COVER CROP OF ANNUAL RYEGRASS (1 LB. / 1,000 SQUARE FEET) OF WINTER RYE (3.5 LBS. / 1,000 SQUARE FEET) IN ACCORDANCE WITH ACCEPTED SEEDING PRACTICES.
   c. STOCKPILE HEIGHTS MUST NOT EXCEED 35'. STOCKPILE SLOPES MUST BE 2:1 OR FLATTER.
   d. STOCKPILES SHALL BE LOCATED WHERE SHOWN ON THE PLANS OR AT AN ALTERNATE LOCATIONS APPROVED BY THE CONSERVATION DISTRICT.
   e. BEFORE DISPOSING OF SOIL, OR RECEIVING BORROW FOR THE SITE, THE OPERATOR MUST ASSURE THAT EACH SPOIL OR BORROW AREA HAS AN EROSION AND SEDIMENT CONTROL PLAN APPROVED BY THE COUNTY CONSERVATION DISTRICT, AND WHICH IS BEING IMPLEMENTED AND MAINTAINED ACCORDING TO CHAPTER 102 REGULATIONS.

3. FILTER SOCK
   a. FILTER SOCKS SHALL BE USED TO INTERCEPT SEDIMENT-LADEN RUNOFF FOR SMALL WATERSHEDS.
   b. FILTER SOCKS SHALL BE INSTALLED IN ACCORDANCE WITH THE MAXIMUM SLOPE TO LENGTH RELATIONSHIPS AS PER MANUFACTURER, PADEP, AND CONSERVATION DISTRICT RECOMMENDATIONS.
   c. THE CONTRACTOR SHALL MAINTAIN THE SOCK IN A FUNCTIONAL CONDITION AT ALL TIMES, AND IT SHALL BE ROUTINELY INSPECTED.
   d. THE SOCK SHALL BE ROUTINELY MAINTAINED THROUGHOUT CONSTRUCTION AND REPAIRED WHEN NECESSARY.
   e. THE CONTRACTOR SHALL REMOVE SEDIMENT COLLECTED AT THE BASE OF THE SOCK WHEN SEDIMENT DEPTHS REACH ONE HALF OF THE EXPOSED HEIGHT OF THE SOCK, OR AS DIRECTED BY INSPECTION AUTHORITIES.

4. INLET SEDIMENT PROTECTION
   a. INLET SEDIMENT PROTECTION SHALL BE UTILIZED AT ALL STORM SEWER INLETS SUSCEPTIBLE TO RECEIVING SEDIMENT LADEN RUNOFF, AND WHICH DO NOT DISCHARGE TO A DESIGNATED SEDIMENT TRAP OR SEDIMENT BASIN.
   b. THE CONTRACTOR SHALL UTILIZE THE TYPE OF INLET PROTECTION SHOWN ON THE EROSION CONTROL PLANS AND DETAILS. AT THE CONTRACTOR'S DISCRETION, A @BAG TYPE-A INLET INSERT MAY BE USED FOR INLET PROTECTION IN ALL PROPOSED PAVED AREAS.
   c. THE INLET SEDIMENT PROTECTION SHALL BE CHECKED AND FLUSHED, AS REQUIRED, AFTER EACH RAINFALL/RUNOFF EVENT. IF NECESSARY, THE INLET SEDIMENT PROTECTION SHALL BE REPLACED TO ENSURE SEDIMENTS DO NOT ENTER THE STORM SEWER SYSTEM.
   d. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE INLET SEDIMENT PROTECTION TO MAINTAIN STORM WATER DRAINAGE, AND TO PREVENT SEDIMENT FROM COLLECTING AROUND THE INLET.
   e. SEDIMENT MUST BE REMOVED FROM INLET PROTECTION AFTER EACH STORM EVENT, OR WHEN THE DISTANCE BETWEEN THE GRATE AND THE SEDIMENT LEVEL IS REDUCED TO 1/8".
   f. STORM WATER INLETS, WHICH DO NOT DISCHARGE TO SEDIMENT TRAPS OR BASINS, MUST BE PROTECTED UNTIL THE TRIBUTARY AREAS ARE STABILIZED.

5. TEMPORARY SEEDING/MULCHING
   a. TEMPORARY SEEDING AND MULCHING SHALL BE APPLIED WHERE INDICATED IN THE NARRATIVE TO PROVIDE STABILIZATION TO EXPOSED AREAS. ALL AREAS WHERE CONSTRUCTION ACTIVITY HAS CEASED SHALL IMMEDIATELY BE SEEDED WITH THE SPECIFIED TEMPORARY SEED MIX.
   b. STRAW OR HAY MULCH SHALL BE APPLIED AT A MINIMUM RATE OF 3.0 TONS PER ACRE (ENOUGH TO LIGHTLY COVER 75% TO 90% OF THE DESIGNATED AREAS).
   c. THE TEMPORARY SEEDING/MULCHING SHALL BE AS INDICATED ON THE EROSION AND SEDIMENT CONTROL PLANS, AND AS OUTLINED IN THE SEEDING/MULCHING SECTION OF THIS NARRATIVE.
   d. MULCH CONTROL NETTING, OR EROSION CONTROL BLANKETS, MUST BE INSTALLED ON ALL SLOPES GREATER THAN 3:1.

PERMANENT CONTROL MEASURES AND FACILITIES

1. PERMANENT GRASS
   a. ALL DISTURBED AREAS THAT ARE NOT TO BE PAVED SHALL BE COVERED WITH GRASS IN ORDER TO MINIMIZE EROSION. THE SEED MIXTURE SHALL BE APPLIED AS SPECIFIED OR IT MAY BE HYDRO-SEEDED BY A PERSON EXPERIENCED IN SUCH APPLICATIONS. SEED SHALL BE APPLIED DURING THE REGULAR GROWING SEASON OF THE SPECIES SPECIFIED.
   b. PERMANENT SEEDING SHALL NOT OCCUR BEFORE APRIL 1 OR AFTER OCTOBER 15. DURING SUMMER APPLICATIONS, THE PERCENTAGE OF HARD SEED IN THE MIX, AND THE RATE OF APPLICATION, SHALL BE INCREASED. IF SEEDING CANNOT OCCUR DURING THE REGULAR GERMINATION PERIOD, THE EXPOSED AREAS SHALL BE MULCHED AS INDICATED PREVIOUSLY, AND THEN SEEDED WHEN THE GERMINATION PERIOD OCCURS.
   c. SEED MIXTURE FOR PERMANENT SEEDING BY THE CONTRACTOR SHALL BE IN ACCORDANCE WITH SEEDING SCHEDULE ON THE DRAWINGS.
   d. SOIL AMENDMENTS, SUCH AS LIME AND FERTILIZER, SHALL BE APPLIED IN ACCORDANCE WITH A SOIL TEST FOR THE TYPE OF SEED PROPOSED. IN LIEU OF A SOIL TEST, AMENDMENTS SHALL BE APPLIED AT THE RATES SPECIFIED IN THE SEEDING/MULCHING SECTION OF THIS NARRATIVE.

2. MULCH
   a. STRAW MULCH SHALL BE APPLIED TO SEEDING AREAS TO HELP ESTABLISH A PERMANENT GRASS COVER AND TO PREVENT EROSION.
   b. STRAW OR HAY MULCH SHALL BE APPLIED AT A MINIMUM RATE OF 3.0 TONS PER ACRE (ENOUGH TO LIGHTLY COVER 75% TO 90% OF THE DESIGNATED AREA).
   c. AREAS MAY BE HYDRO-MULCHED AS AN ALTERNATIVE TO STRAW MULCH, IF DESIRED.

3. SOD
   a. IN AREAS WHERE THE SLOPE IS 2:1 OR GREATER, THE DEVELOPER WILL INSTALL SOD. SOD MATERIAL AND INSTALLATION SHALL CONFORM TO THE GUIDELINE SPECIFICATIONS TO SODDING, BY THE AMERICAN SOD PRODUCERS ASSOCIATION.
   b. SOD SHALL BE INSTALLED DURING THE REGULAR GROWING SEASON OF THE SEED SPECIES OF WHICH THE SOD IS COMPRISED, OR GENERALLY NOT BEFORE APRIL 1 OR AFTER OCTOBER 15.

4. EROSION CONTROL MATTING AND WATERCOURSE PROTECTION
   a. EROSION CONTROL MATTING SHALL BE USED WHERE INDICATED ON THE PLAN AND AT THE OWNER'S/CONTRACTOR'S DISCRETION AT ALL AREAS WHERE STABILIZATION APPEARS TO BE DIFFICULT.
   b. EROSION CONTROL MATTING/WATERCOURSE PROTECTION SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS, AND IN ACCORDANCE WITH THE PLAN DETAILS.
   c. EROSION CONTROL MATTING MAY BE USED ON STEEP SLOPE AREAS IF DISTURBANCE IS TO OCCUR DURING NO-GERMINATING PERIODS AND STABILIZATION APPEARS DIFFICULT.
   d. EROSION CONTROL BLANKETS MUST BE INSTALLED ON ALL SLOPES GREATER THAN 3:1.

GENERAL EROSION AND SEDIMENT CONTROL NOTES

1. ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE ACCOMPANYING CONSTRUCTION SEQUENCE/STAGING OF EARTHMOVING ACTIVITIES. EACH STAGE SHALL BE COMPLETED BEFORE A SUBSEQUENT STAGE IS INITIATED. BEFORE STARTING ANY EARTH DISTURBANCE ACTIVITIES AT LEAST 7 DAYS PRIOR TO CONSTRUCTION, THE GENERAL CONTRACTOR SHALL INVITE ALL CONTRACTORS INVOLVED IN THOSE ACTIVITIES, (THE LANDOWNER, THE EROSION AND SEDIMENTATION CONTROL PLAN DESIGNER, AND A REPRESENTATIVE OF THE COUNTY CONSERVATION DISTRICT FOR AN ONSITE PRE-CONSTRUCTION MEETING, ALSO AT LEAST 3 DAYS BEFORE STARTING ANY EARTH DISTURBANCE ACTIVITIES, ALL CONTRACTORS INVOLVED IN THOSE ACTIVITIES SHALL NOTIFY THE PENNSYLVANIA ONE-CALL SYSTEM INCORPORATED AT 800-242-1776 TO LOCATE BURIED UTILITIES.
2. UNTIL THE SITE IS STABILIZED, ALL EROSION AND SEDIMENTATION BMP'S MUST BE MAINTAINED PROPERLY. MAINTENANCE MUST INCLUDE INSPECTIONS OF ALL EROSION AND SEDIMENTATION BMP'S AFTER EACH RUNOFF EVENT AND ON A WEEKLY BASIS. ALL SITE INSPECTIONS WILL BE DOCUMENTED IN AN INSPECTION LOG KEPT FOR THIS PURPOSE. THE COMPLIANCE ACTIONS AND THE DATE, TIME, AND NAME OF THE PERSON CONDUCTING THE INSPECTION MUST BE NOTED IN THE LOG FOLLOWING EACH INSPECTION. THE INSPECTION LOG WILL BE KEPT ON THE SITE AT ALL TIMES AND MADE AVAILABLE TO THE COUNTY CONSERVATION DISTRICT UPON REQUEST.
3. ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEAN-OUT, REPAIR, REPLACEMENT, REGRADING, RESEEDING, REMULCHING, AND RENETTING MUST BE PERFORMED IMMEDIATELY. IF EROSION AND SEDIMENTATION BMP'S FAIL TO PERFORM AS EXPECTED, REPLACEMENT BMP'S OR MODIFICATIONS OF THOSE INSTALLED WILL BE NEEDED.
4. WHERE BMP'S ARE FOUND TO FAIL TO ALLEVIATE EROSION OR SEDIMENT POLLUTION, THE PERMITTEE OR CO-PERMITEE SHALL INCLUDE THE FOLLOWING INFORMATION:
   A. THE LOCATION AND SEVERITY OF THE BMP'S FAILURE AND POLLUTION EVENTS.
   B. ALL STEPS TAKEN TO REDUCE, ELIMINATE, AND PREVENT THE RECURRENCE OF THE NON-COMPLIANCE.
   C. THE TIME FRAME TO CORRECT THE NON-COMPLIANT, INCLUDING THE EXACT DATES WHEN THE ACTIVITY WILL RETURN TO COMPLIANCE.
5. ONLY LIMITED UP-SLOPE DISTURBANCE WILL BE PERMITTED TO PROVIDE ACCESS TO THE SEDIMENT TRAPS, CONVEYANCE CHANNELS, DIVERSION CHANNELS, AND INTERCEPTOR CHANNELS FOR GRADING AND ACQUIRING BORROW TO CONSTRUCT THOSE CONTROLS AS REQUIRED.
6. EROSION AND SEDIMENTATION CONTROLS MUST BE CONSTRUCTED, STABILIZED, AND FUNCTIONAL BEFORE GENERAL SITE DISTURBANCE WITHIN THE TRIBUTARY AREAS OF THOSE CONTROLS.
7. AFTER FINAL SITE STABILIZATION HAS BEEN ACHIEVED, TEMPORARY EROSION AND SEDIMENTATION CONTROLS MUST BE REMOVED. AREAS DISTURBED DURING REMOVAL OF THE CONTROLS MUST BE STABILIZED.
8. VEHICLES MAY ONLY ENTER AND EXIT AT THE LOCATION OF APPROVED CONSTRUCTION ENTRANCE(S).
9. STOCK PILE HEIGHTS MUST NOT EXCEED 35 FEET NOR SHALL THE SIDE SLOPE EXCEED 2:1.
10. SEDIMENT BASINS/TRAPS MUST BE PROTECTED FROM UNAUTHORIZED ACTS OF THIRD PARTIES.
11. CLEANOUT STAKES SHALL BE PLACED AT HALF DISTANCES FROM POINTS OF CONCENTRATED INFLOWS INTO BASINS/TRAPS TO OUTLET STRUCTURES. SEDIMENT SHALL BE REMOVED WHEN SEDIMENT ACCUMULATED TO THE CLEAN OUT ELEVATION ON THE STAKES.
12. SILT FENCING MUST BE INSTALLED PARALLEL TO EXISTING CONTOURS OR CONSTRUCTED LEVEL ALIGNMENTS. ENDS OF SILT FENCING MUST EXTEND 8', TRAVELING UP-SLOPE AT 45 DEGREES TO THE ALIGNMENT OF THE MAIN FENCING SECTION.
13. SEDIMENT MUST BE REMOVED WHERE ACCUMULATIONS REACH ONE-HALF THE ABOVE GROUND HEIGHT OF THE SILT FENCING.
14. ANY FENCING THAT HAS BEEN UNDERMINED OR TOPPED MUST BE REPLACED WITH FILTER OUTLETS IMMEDIATELY.
15. STORM WATER INLETS MUST BE PROTECTED UNTIL THE TRIBUTARY ACRES ARE STABILIZED.
16. SEDIMENT MUST BE REMOVED FROM INLET PROTECTION AFTER EACH STORM.
17. ANY DISTURBED AREA ON WHICH ACTIVITY HAS CEASED MUST BE SEEDED AND MULCHED IMMEDIATELY. DURING NON-GERMINATING PERIODS, MULCH MUST BE APPLIED AT THE RECOMMENDED RATES. DISTURBED AREAS WHICH ARE NOT AT FINISHED GRADE AND WHICH WILL BE REDISTURBED WITHIN ONE YEAR MAY BE SEEDED AND MULCHED WITH A QUICK GROWING TEMPORARY SEEDING MIXTURE AND MULCH AS SPECIFIED.
18. DIVERSIONS, CHANNELS, SEDIMENT TRAPS, AND STOCKPILES MUST BE SEEDED AND MULCHED IMMEDIATELY. THEY SHALL BE CONSTRUCTED FREE OF ROCKS, TREE ROOTS, STUMPS, OR OTHER PROJECTIONS THAT IMPEDE NORMAL CHANNEL FLOW AND/OR PREVENT GOOD LINING TO SOILS CONTACT. CHANNEL SHALL BE INITIALLY OVER EXCAVATED TO ALLOW FOR THE PLACEMENT OF TOPSOIL.
19. THE APPLICANT WILL BE RESPONSIBLE FOR THE PROPER CONSTRUCTION, STABILIZATION, AND MAINTENANCE OF ALL EROSION AND SEDIMENTATION CONTROLS AND RELATED ITEMS INCLUDED ON THIS PLAN.
20. THE APPLICANT MUST DEVELOP, AND HAVE APPROVED BY THE COUNTY CONSERVATION DISTRICT, A SEPARATE EROSION AND SEDIMENTATION CONTROL PLAN FOR EACH SPOIL, BORROW, OR OTHER WORK AREA NOT DETAILED ON THE APPROVED PLAN, WHETHER LOCATED WITHIN OR OUTSIDE THE CONSTRUCTION LIMITS. PLAN MUST BE IN COMPLIANCE WITH CHAPTER 102 AND/OR OTHER STATE OR FEDERAL REGULATIONS.
21. UNLESS OTHERWISE NOTED, THE LIMITS OF GRADING SHALL BE CONSIDERED THE LIMITS OF DISTURBANCE.
22. SHOULD ANY MEASURES CONTAINED WITHIN THIS PLAN PROVE INCAPABLE OF ADEQUATELY REMOVING SEDIMENT FROM ON-SITE FLOWS PRIOR TO DISCHARGE OR STABILIZING THE SURFACES INVOLVED, ADDITIONAL MEASURES MUST BE IMMEDIATELY IMPLEMENTED BY THE APPLICANT TO ELIMINATE ALL SUCH PROBLEMS.
23. SHOULD UNFORESEEN EROSIVE CONDITIONS DEVELOP DURING CONSTRUCTION, THE CONTRACTOR SHALL TAKE ACTION TO REMEDY SUCH CONDITIONS AND TO PREVENT DAMAGE TO ADJACENT PROPERTIES AS A RESULT OF INCREASED RUNOFF AND/OR SEDIMENT DISPLACEMENT. STOCKPILES OF WOOD CHIPS, HAY BALES, CRUSHED STONE AND OTHER MULCHES SHALL BE HELD IN READINESS TO DEAL IMMEDIATELY WITH EMERGENCY PROBLEMS OF EROSION.
24. THE CONTRACTOR IS ADVISED TO BECOME THOROUGHLY FAMILIAR WITH THE PROVISIONS OF APPENDIX 64, EROSION CONTROL RULES AND REGULATIONS, TITLE 25, PART I, DEPARTMENT OF ENVIRONMENTAL RESOURCES, SUB-PART C, PROTECTION OF NATURAL RESOURCES, ARTICLE III, WATER RESOURCES, CHAPTER 102, EROSION CONTROL.
25. PROTECTION TO EXISTING TREES AND SHRUBS SHALL BE TAKEN BY THE CONTRACTOR TO ELIMINATE UNNECESSARY DAMAGE.
26. A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN MUST BE AVAILABLE AT THE PROJECT SITE AT ALL TIMES.
27. BEFORE INITIATING ANY REVISION TO THE APPROVED EROSION AND SEDIMENT CONTROL PLAN OR REVISIONS TO OTHER PLANS WHICH MAY AFFECT THE EFFECTIVENESS OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN, THE OPERATOR MUST RECEIVE APPROVAL OF THE REVISIONS FROM THE COUNTY CONSERVATION DISTRICT.
28. ALL PUMPING OF SEDIMENT LADEN WATER SHALL BE THROUGH A SEDIMENT CONTROL BMP, SUCH AS A PUMPED WATER FILTER BAG DISCHARGING OVER NON-DISTURBED AREAS.
29. THE OPERATOR SHALL REMOVE FROM THE SITE, RECYCLE, OR DISPOSE OF ALL BUILDING MATERIALS AND WASTE IN ACCORDANCE WITH THE DEPARTMENTS SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA. CODE 260.1 ER SEQ., AND 287.1 ER SEQ. THE CONTRACTOR SHALL NOT ILLEGALLY BURY, DUMP, OR DISCHARGE ANY BUILDING MATERIAL OR WASTES AT THE SITE.
30. ALL SLOPES 3:1 OR GREATER SHALL BE STABILIZED WITH EROSION CONTROL BLANKETING (ECB).
31. SEDIMENT REMOVED FROM BMPS DURING CONSTRUCTION WILL BE RETURNED TO UPLAND AREAS ON SITE WITH EXISTING SEDIMENT PROTECTION MEASURES IN PLACE AND INCORPORATED INTO THE SITE GRADING.
32. IMMEDIATELY AFTER EARTH DISTURBANCE ACTIVITIES, PERMANENT STABILIZATION OF ALL DISTURBED AREAS SHALL BE CARRIED OUT. DURING NON-GERMINATING PERIODS, MULCH MUST BE APPLIED AT THE SPECIFIED RATES. DISTURBED AREAS WHICH ARE NOT AT FINISHED GRADE AND WHICH WILL BE RE-DISTURBED WITHIN 1 YEAR MUST BE STABILIZED IN ACCORDANCE WITH THE TEMPORARY VEGETATIVE STABILIZATION SPECIFICATIONS. DISTURBED AREAS WHICH ARE AT FINAL GRADE OR WHICH WILL NOT BE RE-DISTURBED WITHIN 1 YEAR MUST BE STABILIZED IN ACCORDANCE WITH THE PERMANENT VEGETATIVE STABILIZATION SPECIFICATIONS.
33. UPON COMPLETION OF ALL EARTH DISTURBANCE ACTIVITIES AND PERMANENT STABILIZATION OF ALL DISTURBED AREAS, THE OWNER AND/OR OPERATORS SHALL CONTACT THE COUNTY CONSERVATION DISTRICT FOR A FINAL INSPECTION PRIOR TO REMOVAL OF THE BMPS.
34. SEDIMENT BASINS/TRAPS SHALL BE KEPT FREE OF ALL TRASH, CONCRETE WASH WATER AND OTHER DEBRIS THAT POSE THE POTENTIAL FOR CLOGGING THE BASIN/TRAP OUTLET STRUCTURES AND/OR POSE THE POTENTIAL FOR POLLUTION TO WATERS OF THE COMMONWEALTH.
35. WHEN SEDIMENT HAS ACCUMULATED TO THE CLEAN OUT ELEVATION ON ANY STAKE, ALL ACCUMULATED SEDIMENT SHALL BE REMOVED FROM THE ENTIRE TRAP/BASIN BOTTOM.
36. APPROVAL OF THE USE OF SKIMMER(S) DOES NOT APPROVE USE OF ANY SKIMMER(S) IN VIOLATION OF ANY PATENT, PATENT RIGHTS, AND/OR PATENT LAWS.
37. FILL MATERIAL FOR THE EMBANKMENTS SHALL BE FREE OF ROOTS, OR OTHER WOODY VEGETATION, ORGANIC MATERIAL, LARGE STONES, AND OTHER OBJECTIONABLE MATERIALS. THE EMBANKMENT SHALL BE COMPACTED IN MAXIMUM 6" LAYERED LIFTS AT 95% DENSITY.
38. A MINIMUM 6" LAYER OF TOPSOIL SHALL BE PLACED ON ALL DISTURBED AREAS PRIOR TO PERMANENT STABILIZATION AND RE VEGETATION.
39. AFTER FINAL SITE STABILIZATION HAS BEEN ACHIEVED, TEMPORARY EROSION AND SEDIMENT BMPS MUST BE REMOVED. AREAS DISTURBED DURING REMOVAL OF THE BMPS MUST BE STABILIZED IMMEDIATELY.

FILL DETERMINATION

1. TO DETERMINE WHETHER FILL IS CLEAN OR REGULATED, THE CONTRACTOR MUST PERFORM ENVIRONMENTAL DUE DILIGENCE.

   ENVIRONMENTAL DUE DILIGENCE IS DEFINED AS INVESTIGATIVE TECHNIQUES, INCLUDING, BUT NOT LIMITED TO, VISUAL PROPERTY INSPECTIONS, ELECTRONIC DATABASE SEARCHES, REVIEW OF OWNERSHIP AND USE HISTORY OF PROPERTY, SANBORN MAPS, ENVIRONMENTAL QUESTIONNAIRES, TRANSACTION SCREENS, ANALYTICAL TESTING, ENVIRONMENTAL ASSESSMENTS OR AUDITS.

   A) IF DUE DILIGENCE SHOWS NO EVIDENCE OF A RELEASE OF A REGULATED SUBSTANCE, THE MATERIAL MAY BE MANAGED AS CLEAN FILL UNDER DEP'S MANAGEMENT OF FILL POLICY.

   B) IF DUE DILIGENCE SHOWS EVIDENCE OF A RELEASE, THE MATERIAL MUST BE TESTED TO DETERMINE IF IT QUALIFIES AS CLEAN FILL. TESTING MUST BE PERFORMED IN ACCORDANCE WITH THE PENNSYLVANIA DEP, BUREAU OF LAND RECYCLING AND WASTE MANAGEMENT'S "MANAGEMENT OF FILL POLICY."

      I. IF TESTING REVEALS THAT THE MATERIAL CONTAINS CONCENTRATIONS OF REGULATED SUBSTANCES THAT ARE BELOW THE RESIDENTIAL LIMITS ESTABLISHED IN DEP'S MANAGEMENT OF FILL POLICY, THE MATERIAL MUST BE MANAGED AS CLEAN FILL.

      II. IF TESTING REVEALS THAT THE MATERIAL CONTAINS CONCENTRATIONS OF REGULATED SUBSTANCES THAT EXCEED THE LIMITS ESTABLISHED IN DEP'S MANAGEMENT OF FILL POLICY, THE MATERIAL MUST BE MANAGED AS REGULATED FILL.

   CLEAN FILL IS DEFINED AS, UNCONTAMINATED, NONWATER-SOLUBLE, NONDECOMPOSABLE INERT SOLID MATERIAL. THE TERM INCLUDES SOIL, ROCK, STONE, DREDGED MATERIAL, USED ASPHALT, AND BRICK, BLOCK OR CONCRETE FROM CONSTRUCTION AND DEMOLITION ACTIVITIES THAT IS SEPARATE FROM OTHER WASTE AND RECOGNIZABLE AS SUCH (25 PA CODE SECTIONS 271.101 AND 287.101). THE TERM DOES NOT INCLUDE MATERIALS PLACED IN OR ON THE WATERS OF THE COMMONWEALTH UNLESS OTHERWISE NOTED.

2. THE CONTRACTOR MAY NOT BLEND OR MIX MATERIALS TO BECOME CLEAN FILL. MATERIALS THAT CONTAIN REGULATED SUBSTANCES THAT ARE INTENTIONALLY RELEASED MAY NOT BE MANAGED UNDER DEP'S MANAGEMENT OF FILL POLICY.

RECYCLING OR DISPOSAL OF MATERIALS

1. PROCEDURES WHICH ENSURE THAT THE PROPER MEASURES FOR THE RECYCLING OR DISPOSAL OF MATERIALS ASSOCIATED WITH OR FROM THE PROJECT SITE WILL BE UNDERTAKEN IN ACCORDANCE WITH DEPARTMENT REGULATIONS.
2. INDIVIDUALS RESPONSIBLE FOR EARTH DISTURBANCE ACTIVITIES MUST ENSURE THAT PROPER MECHANISMS ARE IN PLACE TO CONTROL WASTE MATERIALS.
3. CONSTRUCTION WASTES INCLUDE, BUT ARE NOT LIMITED TO, EXCESS SOIL MATERIALS, BUILDING MATERIALS, CONCRETE WASH WATER, SANITARY WASTES, ETC. THAT COULD ADVERSELY IMPACT WATER QUALITY.
4. THE CONTRACTOR SHALL PLAN AND IMPLEMENT MEASURES FOR HOUSEKEEPING, MATERIALS MANAGEMENT, AND LITTER CONTROL DURING CONSTRUCTION.
5. WHEREVER POSSIBLE, RECYCLING OF EXCESS MATERIALS IS PREFERRED, RATHER THAN DISPOSAL. DISPOSAL OF CONSTRUCTION WASTES SHALL BE IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL GUIDELINES AND REGULATIONS (25 PA CODE 260.1 ET SEQ., 271.1E. SEQ. AND 287.1 ET SEQ).

MAINTENANCE

1. ALL SEDIMENT AND EROSION CONTROL FACILITIES SHALL BE CHECKED FOR DAMAGE WEEKLY AND/OR AFTER EACH PRECIPITATION EVENT. ALL FACILITIES THAT ARE DAMAGED, CLOGGED, OR CAN NO LONGER EFFECTIVELY PERFORM THE JOB IN WHICH THEY ARE DESIGNED, SHALL BE REPLACED.
2. ALL SEDIMENT REMOVED FROM SEDIMENT TRAPPING DEVICES SHALL BE DISPOSED OF IN A MANNER THAT WILL NOT CAUSE EROSION OR SEDIMENTATION, AND SHALL BE PLACED IN AN AREAS WITHIN THE DEFINED LIMITS OF DISTURBANCE.
3. ANY PERMANENTLY SEEDED AREAS THAT BECOME ERODED OR DISTURBED SHALL HAVE THE TOPSOIL REPLACED, THE GRASS RESEEDED, AND THE MULCH REAPPLIED, OR, AT THE DISCRETION OF THE OWNER, SOD MAY BE INSTALLED.
4. UNTIL THE SITE HAS ACHIEVED FINAL STABILIZATION, THE OWNER AND OR CONTRACTOR SHALL PROPERLY IMPLEMENT, OPERATE AND MAINTAIN, ALL THE BEST MANAGEMENT PRACTICES AND EROSION AND SEDIMENT CONTROL FEATURES. MAINTENANCE SHALL INCLUDE INSPECTIONS OF ALL EROSION AND SEDIMENTATION CONTROLS AFTER EACH RUNOFF EVENT, AND ON A WEEKLY BASIS. ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEAN OUT, REPAIR, REPLACEMENT, REGRADING, RESEEDING, REMULCHING, AND RENETTING, MUST BE PERFORMED IMMEDIATELY.
5. THE OPERATOR SHALL REMOVE FROM THE SITE, RECYCLE OR DISPOSE OF, ALL BUILDING MATERIALS AND WASTES IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AS INDICATED IN CHAPTER 25 OF THE PENNSYLVANIA CODE.

SITE STABILIZATION

1. UPON COMPLETION OF AN EARTH DISTURBANCE ACTIVITY, OR ANY STAGE OR PHASE OF AN ACTIVITY, THE OPERATOR SHALL IMMEDIATELY STABILIZE THE DISTURBED AREAS TO PROTECT FROM ACCELERATED EROSION. DURING NON-GERMINATING PERIODS, MULCH MUST BE APPLIED AT THE SPECIFIED RATES. DISTURBED AREAS WHICH ARE NOT AT FINISHED GRADE AND WHICH WILL BE REDISTURBED WITHIN 1-YEAR MAY BE STABILIZED IN ACCORDANCE WITH TEMPORARY SEEDING SPECIFICATIONS. DISTURBED AREAS WHICH ARE EITHER AT FINISHED GRADE OR WILL NOT BE REDISTURBED WITHIN 1-YEAR, MUST BE STABILIZED IN ACCORDANCE WITH PERMANENT SEEDING SPECIFICATIONS.
2. SPREAD TOPSOIL (6") OVER ALL AREAS WHICH HAVE NOT BEEN PAVED (OR WILL NOT BE PAVED) AND ALL AREAS WHICH WERE NOT SEEDED. FINAL PASSES DURING FINE GRADING SHALL BE MADE AT RIGHT ANGLES TO THE SLOPES. SEED ALL AREAS WITH A PERMANENT SEED MIX AS SPECIFIED, AND PROVIDE MULCH OVER ALL FRESHLY SEEDED AREAS. ALL SEEDED AREAS MUST BE MULCHED IMMEDIATELY AFTER SEEDING HAS BEEN COMPLETED.
3. ASSURE SITE STABILIZATION OF ALL AREAS OF THE SITE PRIOR TO REMOVING EROSION AND SEDIMENT CONTROLS. SEED AND MULCH ANY AREAS OF MINIMAL DISTURBANCE RESULTING FROM THE REMOVAL OF EROSION AND SEDIMENT CONTROLS.
4. UNTIL THE SITE HAS ACHIEVED FINAL STABILIZATION, THE OWNER AND/OR CONTRACTOR SHALL PROPERLY IMPLEMENT, OPERATE, AND MAINTAIN ALL THE BEST MANAGEMENT PRACTICES. MAINTENANCE SHALL INCLUDE INSPECTIONS OF ALL EROSION AND SEDIMENTATION CONTROL AFTER EACH RUNOFF EVENT AND ON A WEEKLY BASIS. ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEAN-OUT, REPAIR, REPLACEMENT, REGRADING, RESEEDING, REMULCHING, AND RENETTING, MUST BE PERFORMED IMMEDIATELY.
5. AN AREA SHALL BE CONSIDERED TO HAVE ACHIEVED FINAL STABILIZATION WHEN IT HAS A MINIMUM OF 70% UNIFORM PERENNIAL VEGETATIVE COVER OF OTHER PERMANENT NON-VEGETATIVE COVER WITH A DENSITY SUFFICIENT TO RESIST ACCELERATED SURFACE EROSION AND SUBSURFACE CHARACTERISTICS SUFFICIENT TO RESIST SLIDING OR OTHER MOVEMENTS.

102.4(b)(4) E&S PLANNING AND DESIGN NOTES

1. ALL TEMPORARY AND PERMANENT EROSION AND SEDIMENT CONTROL FACILITIES HAVE BEEN DESIGNED TO THE STANDARDS ESTABLISHED IN THE EROSION AND SEDIMENT POLLUTION CONTROL PROGRAM MANUAL (PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, BUREAU OF WATERWAYS ENGINEERING AND WETLANDS, DIVISION OF WETLANDS, ENCROACHMENT AND TRAINING) FINAL - MARCH 2012 (TECHNICAL GUIDANCE NUMBER 363-2134-008).
2. THIS E&S PLAN MINIMIZES THE EXTENT AND DURATION OF EARTH DISTURBANCES THROUGH THE THOUGHTFUL AND INTENTIONAL SEQUENCING OF CONSTRUCTION ACTIVITIES. THE SEQUENCE OF CONSTRUCTION ATTEMPTS TO MINIMIZE AREA(S) OF THE SITE THAT ARE OPEN/DISTURBED AT ANY GIVEN TIME AND ENDEAVORS TO PROMOTE THE IMMEDIATE STABILIZATION OF DISTURBED AREAS THROUGH SEEDING/MULCHING AND/OR OTHER STABILIZATION METHODS.
3. THIS E&S PLAN MAXIMIZES THE PROTECTION OF EXISTING DRAINAGE FEATURES AND VEGETATION THROUGH THE INSTALLATION OF TREE PROTECTION FENCING AND OTHER PHYSICAL BARRIERS SUCH AS FILTER SOCKS TO HELP DELINEATE CONSTRUCTION AREAS AND TO PREVENT UNNECESSARY OR UNINTENTIONAL ENCROACHMENT.
4. THIS E&S PLAN MINIMIZES SOIL COMPACTION BY PROVIDING UNDISTURBED/SCARIFIED SUBGRADE FOR THE INFILTRATION FACILITY BOTTOM FIELDS AND ALSO THROUGH MINIMIZING DISTURBANCES OUTSIDE OF PROPOSED IMPERVIOUS AREAS.
5. THIS E&S PLAN UTILIZES OTHER MEASURES OR CONTROLS THAT PREVENT OR MINIMIZE THE GENERATION OF INCREASED STORMWATER. THE MAIN MEASURE IS BY PRESERVING EXISTING FLOW PATHS AND ENSURING ALL RUNOFF IS CLEANED USING E&S BMPS PRIOR TO DISCHARGING TO EXISTING NATURAL DRAINAGE WAYS. SLOPE AND CHANNEL STABILIZATION ALSO HELP MINIMIZE THE GENERATION OF INCREASED STORMWATER AND EROSION.

REVISIONS PER:	DATE:	BY:
1. COL/LCCD COMMENTS	3/28/25	EWB
2. -	-	-
3. -	-	-
4. -	-	-
5. -	-	-

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CONSTRUCTION SEQUENCE (CRITICAL STAGES OF IMPLEMENTATION IN RED BELOW)

CONSTRUCTION IS EXPECTED TO BEGIN SPRING 2025, AFTER ALL MUNICIPAL AND STATE APPROVALS HAVE BEEN RECEIVED. CONSTRUCTION WILL PROCEED IN A TIMELY MANNER IN ORDER TO LIMIT THE POTENTIAL FOR ACCELERATED EROSION AND SEDIMENTATION. CONTRACTORS SHALL FAMILIARIZE THEMSELVES WITH THE CONSTRUCTION SEQUENCE PRIOR TO BREAKING GROUND TO MINIMIZE THE POTENTIAL FOR ANY SCHEDULING CONFLICTS. THE SEQUENCE OF EARTH MOVING ACTIVITIES SHALL BE APPROXIMATED AS FOLLOWS:

GENERAL CONSTRUCTION STAGING:

1. EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE FOLLOWING STAGING OF EARTHMOVING ACTIVITIES. EACH STAGE SHALL BE COMPLETED BEFORE A SUBSEQUENT STAGE IS INITIATED. BEFORE STARTING ANY EARTH DISTURBANCE ACTIVITIES, THE GENERAL CONTRACTOR SHALL INVITE ALL CONTRACTORS INVOLVED IN THOSE ACTIVITIES, THE LAND OWNER, THE EROSION AND SEDIMENTATION CONTROL PLAN DESIGNER AND A REPRESENTATIVE OF THE COUNTY CONSERVATION DISTRICT AND A REPRESENTATIVE OF THE CITY OF LANCASTER (CONTACT ANGELA BRACKBILL AT (717)234-4296 OR ABRACKBILL@CITYOFLANCASTERPA.GOV FOR AN ONSITE PRE-CONSTRUCTION MEETING. ALSO, AT LEAST 3 DAYS BEFORE STARTING ANY EARTH DISTURBANCE ACTIVITIES, ALL CONTRACTORS INVOLVED IN THOSE ACTIVITIES SHALL NOTIFY THE PENNSYLVANIA ONE-CALL SYSTEM INCORPORATED AT 1-800-242-1776 TO LOCATE BURIED UTILITIES.
2. THE CONTRACTOR IS ADVISED TO BECOME THOROUGHLY FAMILIAR WITH THE PROVISIONS OF APPENDIX 64, EROSION AND SEDIMENT CONTROL RULES AND REGULATIONS, TITLE 25, PART I, DEPARTMENT OF ENVIRONMENTAL RESOURCES, SUB-PART C, PROTECTION OF NATURAL RESOURCES, ARTICLE III, WATER RESOURCES, CHAPTER 102 - EROSION CONTROL.
3. PROCEDURES ENSURING THAT THE PROPER MEASURES FOR THE RECYCLING OR DISPOSAL OF MATERIALS ASSOCIATED WITH OR FROM THE PROJECT SITE WILL BE UNDERTAKEN IN ACCORDANCE WITH DEP/COUNTY CONSERVATION DISTRICT REGULATIONS. THE INDIVIDUAL RESPONSIBLE FOR EARTH DISTURBANCE ACTIVITIES MUST ENSURE THAT PROPER MECHANISMS ARE IN PLACE TO CONTROL WASTE MATERIALS. CONSTRUCTION WASTES INCLUDE BUT ARE NOT LIMITED TO, EXCESS SOIL MATERIALS, BUILDING MATERIALS, CONCRETE WASH WATER, AND SANITARY WASTES, ETC. THAT COULD ADVERSELY IMPACT WATER QUALITY. MEASURES SHOULD BE PLANNED AND IMPLEMENTED FOR HOUSEKEEPING, MATERIALS MANAGEMENT, AND LITTER CONTROL. WHEREVER POSSIBLE, RECYCLING OF EXCESS MATERIALS IS PREFERRED TO DISPOSAL.
4. IMMEDIATELY UPON DISCOVERING UNFORESEEN CIRCUMSTANCES POSING THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION, THE OPERATOR SHALL IMPLEMENT APPROPRIATE BEST MANAGEMENT PRACTICES TO ELIMINATE THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION.
5. UPON COMPLETION OF AN EARTH DISTURBANCE ACTIVITY OR ANY STAGE OR PHASE OF AN ACTIVITY, DISTURBED AREAS OF THE SITE SHALL BE IMMEDIATELY SEEDED, MULCHED, OR OTHERWISE PROTECTED FROM ACCELERATED EROSION AND SEDIMENTATION. EROSION AND SEDIMENT CONTROL BMP'S SHALL BE IMPLEMENTED AND MAINTAINED UNTIL PERMANENT STABILIZATION IS ACHIEVED. IN ORDER FOR AN EARTH DISTURBANCE ACTIVITY TO BE CONSIDERED PERMANENTLY STABILIZED, THE DISTURBED AREAS SHALL BE COVERED WITH ONE OF THE FOLLOWING: (1) A MINIMUM UNIFORM 70% PERENNIAL VEGETATIVE COVER, WITH A DENSITY CAPABLE OF RESISTING ACCELERATED EROSION AND SEDIMENTATION. (2) AN ACCEPTABLE BMP, WHICH PERMANENTLY MINIMIZES ACCELERATED EROSION AND SEDIMENTATION.
6. NOTE THAT THE PADEP NPDES PERMITS REQUIRE INSPECTION OF THE POST CONSTRUCTION STORMWATER MANAGEMENT FACILITIES BY A LICENSED PROFESSIONAL. SEE REQUIREMENTS AS HIGHLIGHTED IN THE SEQUENCE BELOW.
7. NO SEDIMENT LADEN RUNOFF SHALL LEAVE THE PROJECT SITE AND/OR BE RECEIVED BY THE UNT TO CONESTOGA RIVER AT ANY TIME. CONTRACTOR MUST PROVIDE, AS NECESSARY, ANY ADDITIONAL EROSION AND SEDIMENTATION CONTROL MEASURES.
8. ALL TRENCH EXCAVATION SHOULD BE LIMITED TO THE LENGTH OF PIPE THAT CAN BE PLACED AND BACK-FILLED BY THE END OF EACH WORKDAY. PROVIDE INLET PROTECTION OR CAPPED INLETS, IMMEDIATELY AFTER INSTALLATION, AS INDICATED ON THE PLANS.
9. IF PUMPING IS REQUIRED DURING CONSTRUCTION, IT SHALL BE IN ACCORDANCE WITH THE PA DEP EROSION AND SEDIMENT CONTROL MANUAL.

SITE SPECIFIC SEQUENCE OF CONSTRUCTION:

1. DELINEATE LIMITS OF DISTURBANCE AND NPDES PERMIT BOUNDARIES AS PART OF THE GRADING/STAKING PROCESS. LIMITS OF DISTURBANCE SHALL BE DEFINED BY THE LIMITS OF PROPOSED GRADING OR AS INDICATED ON THE PLANS. PROVIDE TREE PROTECTION FENCING PRIOR TO ANY CONSTRUCTION ACTIVITIES AND MAINTAIN IN THIS LOCATION UNTIL CONSTRUCTION IS COMPLETED. TREE PROTECTION SHALL BE INSTALLED PRIOR TO ANY CONSTRUCTION OR DEMOLITION ACTIVITIES.
2. INSTALL INLET PROTECTION ON EXISTING INLETS PRIOR TO CLEARING AND GRUBBING FOR THE ROCK CONSTRUCTION ENTRANCE.
3. ROUGH GRADE AT THE PROPOSED ROCK CONSTRUCTION ENTRANCE AND INSTALL THE STABILIZED CONSTRUCTION ENTRANCE AS INDICATED ON THE PLAN. THE CONSTRUCTION ENTRANCE SHALL BE INSTALLED IN ACCORDANCE WITH THE DETAILS PROVIDED ON PLANS, OR AS DIRECTED BY THE COUNTY CONSERVATION DISTRICT. CONTRACTOR IS TO UTILIZE A WASH RACK AS DETAILED.
4. DELINEATE THE CONSTRUCTION STAGING AREA FOR CONTRACTORS. THE CONSTRUCTION STAGING AREA MUST BE IMMEDIATELY STABILIZED AND/OR MAINTAINED IN ORDER TO PREVENT ANY SEDIMENT LADEN RUNOFF AND AT ALL TIMES REMAIN WITHIN THE LIMIT OF DISTURBANCE. STONE/PAVING OR OTHER SUITABLE STABILIZATION FOR THE STAGING AREA SHALL BE PROVIDED AND MAINTAINED AT ALL TIMES. SEDIMENT LADEN RUNOFF IS NOT PERMITTED FROM THE CONSTRUCTION STAGING AREAS.
5. CLEAR AND GRUB ONLY THE AREAS NECESSARY TO INSTALL FILTER SOCKS AS SHOWN ON THE PLAN AND IN ACCORDANCE WITH THE DETAILS PROVIDED. SOCKS SHALL BE INSTALLED PARALLEL TO THE CONTOURS OR CONSTRUCTED AT LEVEL ALIGNMENTS. BOTH ENDS OF THE SOCK SECTIONS MUST EXTEND AT LEAST 8 FEET UP-SLOPE AT 45 DEGREES TO THE MAIN FILTER SOCK ALIGNMENT. SEDIMENT MUST BE REMOVED WHEN ACCUMULATIONS REACH ONE-HALF OF THE HEIGHT OF THE EXPOSED FILTER SOCK OR AS DIRECTED BY THE ENGINEER. ANY SECTION THAT BECOMES COMPROMISED MUST IMMEDIATELY BE REPLACED OR REPAIRED.
6. PROVIDE ALL PERIMETER COMPOST FILTER SOCKS, COMPOST FILTER BERMS, AND ANY REMAINING INLET PROTECTION ON EXISTING INLETS, AS PER PLAN. DURING CONSTRUCTION, COMPOST FILTER SOCKS MAY NEED TO BE ADJUSTED THROUGHOUT CONSTRUCTION.
7. AS EARTH MOVING PROGRESSES, SEED ALL AREAS WITH A PERMANENT SEED MIX AS SPECIFIED, ONCE COMPLETED AND PROVIDE MULCH OVER ALL FRESHLY SEEDED AREAS. ALL SEEDED AREAS MUST BE MULCHED WITHIN 48 HOURS AFTER SEEDING HAS BEEN COMPLETED.
8. STRIP TOPSOIL FROM AREAS TO BE TURFED. TOPSOIL SHOULD BE PLACED OR STOCKPILED IN AN AREA APPROVED BY THE LANCASTER COUNTY CONSERVATION DISTRICT. ALL FILL AND EXCESS TOPSOIL BEYOND WHAT IS NECESSARY TO DRESS LAWN AREAS FOLLOWING CONSTRUCTION IS TO BE REMOVED FROM SITE AND DISPOSED OF AT AN AUTHORIZED LOCATION WITH AND APPROVED EROSION SEDIMENT CONTROL PLAN/NPDES PERMIT.
9. E&S MATTING SHOULD BE APPLIED TO ALL AREAS WITH EQUAL OR GREATER THAN 3:1 SLOPES. AREAS ARE TO BE SEEDED AND MULCHED IMMEDIATELY.
10. CONTRACTOR SHALL COORDINATE UTILITY REPLACEMENT, INSTALLATION, AND RECONFIGURATION DURING CONSTRUCTION AS NECESSARY.
11. CONTRACTOR IS TO ENSURE THERE IS NO EQUIPMENT STORAGE, MATERIAL STOCKPILING, OR VIBRATORY ROLLING / COMPACTION WITHIN THE CITY'S SEWER EASEMENT(S).
12. CONTRACTOR SHALL ENSURE THAT THE EXISTING SEWERS THROUGH THE SITE REMAIN PROTECTED AT ALL TIMES DURING CONSTRUCTION.
13. AS NEW INLETS ARE INSTALLED, IMMEDIATELY PROVIDE INLET PROTECTION OR CAPS AS REQUIRED PER PLAN.
14. AREAS PROPOSED FOR INFILTRATION SCM'S SHALL BE PROTECTED FROM SEDIMENTATION AND COMPACTION DURING THE CONSTRUCTION PHASE TO MAINTAIN MAXIMUM INFILTRATION CAPACITY.
15. INSTALL SCM-I; CONTRACTOR IS TO ENSURE THE INFILTRATION AREA SUBGRADE OF THE FACILITY REMAINS UNCOMPACTED AND PREPARED FOR INFILTRATION. A GEOTECHNICAL ENGINEER SHALL VERIFY THE SUBGRADE CONDITIONS PRESENT DURING CONSTRUCTION OF THE FACILITY. THE CONTRACTOR AND GEOTECHNICAL SHALL WORK TOGETHER TO ENSURE THAT 2 FEET BELOW THE INFILTRATION OF THE BMP (ELEVATIONS 291-299.00) IS FREE OF ROCK. IF ROCK IS ENCOUNTERED, THE GEOTECHNICAL ENGINEER IS TO ADVISE ON PRECAUTIONARY MEASURE TO ENSURE ADEQUATE INFILTRATION. THE DRAINAGE TO THE FACILITIES SHALL BE DIVERTED AND BLOCKED UNTIL THE TERMINATION OF CONSTRUCTION, OR UNTIL THE UPSTREAM DRAINAGE AREA IS FULLY STABILIZED. A GEOTECHNICAL ENGINEER SHALL VERIFY, DESIGN, AND PREPARE THE SURFACE ABOVE SCM-I TO HANDLE CONSTRUCTION LOADING. AT NO TIME SHALL CONSTRUCTION ACTIVITY COMPROMISE THE INSTALLED FACILITY. THIS IS A CRITICAL STAGE. A LICENSED PROFESSIONAL OR DESIGNEE SHALL BE PRESENT DURING THIS STAGE OF CONSTRUCTION.
16. SCM-I SHALL NOT BE CONSTRUCTED NOR RECEIVE RUNOFF FROM DISTURBED AREAS UNTIL THE ENTIRE CONTRIBUTORY DRAINAGE ARE TO THE SCM HAS ACHIEVED FINAL STABILIZATION, UNLESS OTHERWISE AUTHORIZED BY THE CITY AS DESCRIBED IN THE CITY 61 MANUAL.
17. SCM-I SITE SPECIFIC SEQUENCING IS AS FOLLOWS:
    a. ONCE INSTALLATION OF FACILITIES BEGINS, CONTRACTOR SHALL ENSURE AREA OF FACILITY IS MARKED CLEARLY WHERE HEAVY CONSTRUCTION TRAFFIC DOES NOT IMPACT THE SUBGRADE.
    b. INSTALL AND MAINTAIN ADEQUATE EROSION AND SEDIMENT CONTROL MEASURES DURING CONSTRUCTION.
    c. THE EXISTING SUBGRADE UNDER THE BED AREA SHOULD NOT BE COMPACTED OR SUBJECT TO EXCESSIVE CONSTRUCTION EQUIPMENT TRAFFIC PRIOR TO GEOTEXTILE AND STONE BED PLACEMENT.
    d. ENSURE THE SUBGRADE 2 FEET BELOW THE SCM-I INFILTRATION ZONE IS FREE OF ROCK. CONTRACTOR IS TO WORK WITH GEOTECHNICAL ENGINEER TO ENSURE SUFFICIENT INFILTRATION IS ACHIEVED.
    e. WHERE EROSION OF SUBGRADE HAS CAUSED ACCUMULATION OF FINE MATERIALS AND/OR SURFACE PONDING, THIS MATERIAL SHOULD BE REMOVED WITH LIGHT EQUIPMENT AND THE UNDERLYING SOILS SCARIFIED TO A MINIMUM DEPTH OF 6 INCHES WITH A YORK RAKE (OR EQUIVALENT) AND LIGHT TRACTOR, ALL FINE GRADING SHOULD BE DONE BY HAND. ALL BED BOTTOMS SHOULD BE AT LEVEL GRADE.
    f. INSTALL UPSTREAM AND DOWNSTREAM CONTROL STRUCTURES, CLEANOUTS, PERFORATED PIPING AND OTHER NECESSARY STORMWATER STRUCTURES.
    g. GEOTEXTILE/GEOGRID AND BED AGGREGATE SHOULD BE PLACED IMMEDIATELY AFTER APPROVAL OF SUBGRADE PREPARATION AND INSTALLATION OF STRUCTURES. GEOTEXTILE/GEOGRID SHOULD BE PLACED IN ACCORDANCE WITH MANUFACTURER'S STANDARDS AND RECOMMENDATIONS. ADJACENT STRIPS OF MATERIAL SHOULD OVERLAP A MINIMUM OF 16 INCHES. IT SHOULD ALSO BE SECURED AT LEAST 4 FEET OUTSIDE OF BED IN ORDER TO PREVENT ANY RUNOFF OR SEDIMENT FROM ENTERING THE STORAGE BED. THIS EDGE STRIP SHOULD REMAIN IN PLACE UNTIL ALL BARE SOILS CONTIGUOUS TO BEDS ARE STABILIZED. AS THE SITE IS FULLY STABILIZED, EXCESS GEOTEXTILE ALONG BED EDGES CAN BE CUT BACK TO THE EDGE OF THE BED.
    h. CLEAN-WASHED, UNIFORMLY GRADED AGGREGATE SHOULD BE PLACED IN THE BED IN MAXIMUM 8-INCH LIFTS. EACH LAYER SHOULD BE LIGHTLY COMPACTED, WITH CONSTRUCTION EQUIPMENT KEPT OFF THE BED BOTTOM AS MUCH AS POSSIBLE.
    i. APPROVED MEDIA SHOULD BE PLACED OVER INFILTRATION BED IN MAXIMUM 6-INCH LIFTS.
    j. STABILIZE MATERIAL OVER FACILITY.
    k. DO NOT REMOVE INLET PROTECTION/CAPS, OR OTHER EROSION SEDIMENT CONTROL MEASURES UNTIL THE SITE IS FULLY STABILIZED.
18. INSTALL REMAINING DRAINAGE STRUCTURES THROUGHOUT THE SITE. CAP ALL STRUCTURES THAT ARE INFLOWING TO SCM-I.
19. CONNECT OCS-1 TO INFLOW AND OUTLET STRUCTURES. CONTRACTOR SHALL ENSURE THAT NO RUNOFF REACHES THIS STRUCTURE UNTIL THE ENTIRE DRAINAGE AREA IS STABILIZED.
20. CONTRACTOR IS TO AVOID MOVING HEAVY EQUIPMENT OVER THE PROPOSED INFILTRATION AREA WITHOUT APPROPRIATE MEASURES DESIGNED BY A GEOTECHNICAL ENGINEER AND APPROVED BY THE MANUFACTURER TO ENSURE THAT STORMWATER FACILITY IS SAFE AND CAN HANDLE CONSTRUCTION LOADS PROPOSED. SUBGRADE OF INFILTRATION AREA IS TO REMAIN UNCOMPACTED AT ALL TIMES.
21. INSTALL ALL REMAINING IMPROVEMENTS. CONTRACTOR IS TO ENSURE NO SEDIMENT LADEN RUNOFF IS RECEIVED BY CITY STORM NETWORK AT ANY TIME. CONTRACTOR IS TO PROVIDE ADDITIONAL SITE CONTROLS AS DEEMED NECESSARY DURING CONSTRUCTION.
22. FINE GRADE REMAINING SITE AREAS AND INSTALL WALKS AS SHOWN ON THE PLANS. SPREAD TOPSOIL (6" MINIMUM) OVER ALL AREAS WHICH HAVE NOT BEEN PAVED (OR WILL NOT BE PAVED) AND ALL AREAS WHICH WERE NOT SEEDED DURING PREVIOUS CONSTRUCTION STAGES COMPLETED EARLIER DURING THE PROJECT. FINAL PASSES DURING FINE GRADING SHALL BE MADE AT RIGHT ANGLES TO THE SLOPES. SEED ALL AREAS WITH A PERMANENT SEED MIX AS SPECIFIED AND PROVIDE MULCH OVER ALL FRESHLY SEEDED AREAS. ALL SEEDED AREAS MUST BE MULCHED WITHIN 48 HOURS AFTER SEEDING HAS BEEN COMPLETED.
23. INSTALL ALL TREES IN ACCORDANCE WITH DETAILS AND CITY OF LANCASTER TREE MANUAL. PERFORM SOIL TEST ANALYSIS AND APPLY SOIL AMENDMENTS / FERTILIZER, MULCH, WATERING AND MAINTENANCE IN ACCORDANCE WITH ANSI STANDARDS (A300 AND Z60.1).
24. ONCE THE SITE IS STABILIZED AND APPROVED BY THE DESIGN PROFESSIONAL, CONTRACTOR IS TO PREPARE SCM-I FOR FINAL CONFIGURATION.
25. WATER QUALITY DEVICES SUCH AS SNOUTS SHALL BE INSTALLED TO THE PER THE PLAN. COORDINATE WITH MANUFACTURER ON INSTALLATION. CONTRACTOR SHALL ENSURE THAT NO SEDIMENT LADEN RUNOFF REACHES THE PROPOSED BEST MANAGEMENT PRACTICES, AND IS CLEANED PRIOR TO FINAL CONFIGURATION.
26. ANY DISTURBANCE CREATED DURING THE PREVIOUS STEPS, INCLUDING RE-GRADING AS NECESSARY TO ACHIEVE THE FINISHED GRADES AS DEPICTED ON THE APPROVED GRADING/DRAINAGE PLANS, SHALL BE STABILIZED IMMEDIATELY THROUGH SEEDING AND MULCHING.
27. THE REMAINING TEMPORARY SITE EROSION CONTROLS (SUCH AS FILTER SOCKS, INLET PROTECTION, ROCK FILTERS ETC.) SHALL BE REMOVED. ANY DISTURBANCE CREATED DURING THIS PROCEDURE SHALL BE STABILIZED IMMEDIATELY THROUGH SEEDING AND MULCHING.
28. ONCE PROJECT WORK IS COMPLETED AND FULLY STABILIZED , CONTRACTOR IS TO PROVIDE A COMPLETE AS BUILT SURVEY, IN ACCORDANCE WITH THE NPDES NOTICE OF TERMINATION CHECKLIST TO THE ENGINEER FOR ANALYSIS AND SUBMISSION OF THE NPDES NOTICE OF TERMINATION.

GENERAL WASTE MANAGEMENT NOTES

1. PROCEDURES, WHICH ENSURE THAT THE PROPER MEASURES FOR THE RECYCLING OR DISPOSAL OF MATERIALS ASSOCIATED WITH OR FROM THE PROJECT SITE, WILL BE UNDERTAKEN IN ACCORDANCE WITH DEPARTMENT REGULATIONS. INDIVIDUALS RESPONSIBLE FOR EARTH DISTURBANCE ACTIVITIES MUST ENSURE THAT PROPER MECHANISMS ARE IN PLACE TO CONTROL WASTE MATERIALS. CONSTRUCTION WASTES INCLUDE, BUT ARE NOT LIMITED TO, EXCESS SOIL MATERIALS, BUILDING MATERIALS, CONCRETE WASH WATER, SANITARY WASTES, ETC. THAT COULD ADVERSELY IMPACT WATER QUALITY. THE CONTRACTOR SHALL PLAN AND IMPLEMENT MEASURES FOR HOUSEKEEPING, MATERIALS MANAGEMENT, AND LITTER CONTROL DURING CONSTRUCTION. WHEREVER POSSIBLE, RECYCLING OF EXCESS MATERIALS IS PREFERRED, RATHER THAN DISPOSAL. DISPOSAL OF CONSTRUCTION WASTES SHALL BE IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL GUIDELINES AND REGULATIONS (CHAPTER 25 OF THE PENNSYLVANIA CODE).
2. ALL BUILDING MATERIALS AND WASTES THAT ARE REMOVED FROM THE SITE SHALL BE RECYCLED OR DISPOSED OF IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA. CODE §260.1 ET SEQ., §271.1 ET SEQ., AND §287.1 ET SEQ. NO BUILDING MATERIAL OR WASTES OR UNUSED BUILDING MATERIALS SHALL BE BURNED, BURIED, DUMPED, OR DISCHARGED AT THE SITE.
3. IF THE SITE WILL NEED TO HAVE FILL IMPORTED FROM AN OFF SITE LOCATION, THE RESPONSIBILITY FOR PERFORMING ENVIRONMENTAL DUE DILIGENCE AND THE DETERMINATION OF CLEAN FILL WILL RESIDE WITH THE CONTRACTOR, AND SUBJECT TO THE APPROVAL OF THE GEOTECHNICAL ENGINEER. IF THE SITE WILL HAVE EXCESS FILL THAT WILL NEED TO BE EXPORTED TO AN OFF SITE LOCATION, THE RESPONSIBILITY OF CLEAN FILL DETERMINATION AND ENVIRONMENTAL DUE DILIGENCE WILL BE ON THE GEOTECHNICAL ENGINEER, ON BEHALF OF THE APPLICANT.
4. DEFINITIONS AND ENVIRONMENTAL DUE DILIGENCE
    4.1. CLEAN FILL: UNCONTAMINATED, NON-WATER SOLUBLE, NON-DECOMPOSABLE, INERT, SOLID MATERIAL. THE TERM INCLUDES SOIL, ROCK, STONE, DREDGED MATERIAL, USED ASPHALT, AND BRICK, BLOCK OR CONCRETE FROM CONSTRUCTION AND DEMOLITION ACTIVITIES THAT IS SEPARATE FROM OTHER WASTE AND RECOGNIZABLE AS SUCH. THE TERM DOES NOT INCLUDE MATERIALS PLACED IN OR ON THE WATERS OF THE COMMONWEALTH UNLESS OTHERWISE AUTHORIZED. (THE TERM "USED ASPHALT" DOES NOT INCLUDE MILLED ASPHALT OR ASPHALT THAT HAS BEEN PROCESSED FOR RE-USE.)
        4.1.1. FILL MATERIAL THAT DOES NOT QUALIFY AS CLEAN FILL IS REGULATED FILL. REGULATED FILL IS WASTE AND MUST BE MANAGED IN ACCORDANCE WITH THE DEPARTMENT'S MUNICIPAL OR RESIDUAL WASTE REGULATIONS BASED ON PA CODE CHAPTERS 287 RESIDUAL WASTE MANAGEMENT OR 271 MUNICIPAL WASTE MANAGEMENT, WHICHEVER IS APPLICABLE.
        4.1.2. ANY PERSON PLACING CLEAN FILL THAT HAS BEEN AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE MUST USE FORM FP-001 TO CERTIFY THE ORIGIN OF THE FILL MATERIAL AND THE RESULTS OF THE ANALYTICAL TESTING TO QUALIFY THE MATERIAL AS CLEAN FILL. FORM FP-001 MUST BE RETAINED BY THE OWNER OF THE PROPERTY RECEIVING THE FILL.
    4.2. ENVIRONMENTAL DUE DILIGENCE: ACCEPTABLE INVESTIGATIVE TECHNIQUES INCLUDE, BUT ARE NOT LIMITED TO, VISUAL PROPERTY INSPECTIONS, ELECTRONIC DATA BASE SEARCHES, REVIEW OF PROPERTY OWNERSHIP, REVIEW OF PROPERTY USE HISTORY, SANBORN MAPS, ENVIRONMENTAL QUESTIONNAIRES, TRANSACTION SCREENS, ANALYTICAL TESTING, ENVIRONMENTAL ASSESSMENTS OR AUDITS. ANALYTICAL TESTING IS NOT A REQUIRED PART OF DUE DILIGENCE UNLESS VISUAL INSPECTION AND/OR REVIEW OF THE PAST LAND USE OF THE PROPERTY INDICATES THAT THE FILL MAY HAVE BEEN SUBJECTED TO A SPILL OR RELEASE OF REGULATED SUBSTANCES. IF THE FILL MAY HAVE BEEN AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE, IT MUST BE TESTED TO DETERMINE IF IT QUALIFIES AS CLEAN FILL. TESTING SHOULD BE PERFORMED IN ACCORDANCE WITH APPENDIX A OF THE DEPARTMENT'S POLICY "MANAGEMENT OF FILL". ENVIRONMENTAL DUE DILIGENCE, INCLUDING ANY SAMPLING, WILL BE CONDUCTED BY THE GEOTECHNICAL ENGINEER, ON BEHALF OF THE APPLICANT.

SOIL LIMITATIONS AND RESOLUTIONS

THE FOLLOWING RESOLUTIONS ADDRESS TYPICAL ON-SITE SOIL USE LIMITATIONS THAT MAY BE ENCOUNTERED AND GENERIC RESOLUTIONS. **A QUALIFIED GEOTECHNICAL PROFESSIONAL SHALL BE CONSULTED DURING APPROPRIATE STAGES/PHASES OF CONSTRUCTION TO EVALUATE, MAKE RECOMMENDATIONS, AND PROVIDE RESOLUTIONS FOR ALL SOIL USE LIMITATIONS, CONSTRUCTION TECHNIQUES, AND OTHER SOILS-RELATED ITEMS.**

1. CAVING OF CUTBANKS: EXCAVATIONS SHOULD BE ADEQUATELY SLOPED, BENCHED, OR SUPPORTED TO MINIMIZE COLLAPSE AND TO PROTECT PERSONNEL. ALL EXCAVATIONS SHOULD BE COMPLETED IN ACCORDANCE WITH OSHA REQUIREMENTS.
2. CORROSION OF CONCRETE: GENERALLY NOT WITNESSED DURING CONSTRUCTION AS THIS OCCURS OVER EXTENDED PERIODS OF TIME. WHERE SULFATES OF SODIUM, POTASSIUM, CALCIUM OR MAGNESIUM ARE NATURALLY OCCURRING IN THE SOIL OR GROUNDWATER, LOSS OF CONCRETE CONSISTENCY, COHESION AND STRENGTH CAN OCCUR DUE TO REACTIONS WITH HYDRATED COMPOUNDS WITHIN THE HARDENED CEMENT. IF SOILS OR GROUNDWATER ARE FOUND TO CONTAIN SIGNIFICANT AMOUNTS OF THE ABOVE SULFATES, CONCRETE MIXTURES WITH A LOW WATER-TO-CEMENT RATIO AND CEMENT WITH LIMITED AMOUNTS OF TRICALCIUM ALUMINATES SHOULD BE USED. FLY ASH MEETING THE REQUIREMENTS OF ASTM C 618 AND SLAGS MEETING THE REQUIREMENTS OF ASTM C 989 CAN INCREASE THE LIFE EXPECTANCY OF CONCRETE EXPOSED TO SULFATES. CALCIUM CHLORIDE REDUCES SULFATE RESISTANCE, SO IT SHOULD NOT BE USED AS AN ACCELERATING ADMIXTURE.
3. CORROSION OF STEEL: GENERALLY NOT WITNESSED DURING CONSTRUCTION AS THIS OCCURS OVER EXTENDED PERIODS OF TIME. WHERE SOILS ARE HIGH IN CHLORIDES, LOW IN PH, OR WHERE SOILS HAVE HIGH MOISTURE CONTENT, CORROSION OF STEEL IS ACCELERATED. IF ONSITE SOILS ARE FOUND TO BE HIGH IN CHLORIDES, LOW IN PH, OR HIGH IN MOISTURE AS IS TYPICAL IN CLAYEY SOILS, THE THICKNESS OF THE COATINGS (E.G. HOT-DIPPED GALVANIZED) SHOULD BE INCREASED ACCORDING TO THE RECOMMENDATIONS OF THE AMERICAN IRON AND STEEL INSTITUTE (AISI). SOILS WHERE STEEL IS BURIED OR PRESENT SHOULD BE KEPT DRY, IDEALLY WITH LESS THAN 17.5% MOISTURE CONTENT. MAINTAINING DRY SOILS ALSO PREVENTS CHLORIDES FROM BECOMING CORROSIVE TO STEEL. FINALLY, LIMING THE SOIL CAN RAISE THE PH TO >7.0, WHICH IS NOT CONSIDERED CORROSIVE TO STEEL.
4. DROUGHTY: DROUGHT VULNERABLE SOILS HAVE AVAILABLE WATER STORAGE WITHIN THE ROOT ZONE FOR COMMODITY CROPS LESS THAN OR EQUAL TO 6". SOIL AMENDMENT/RESTORATION TECHNIQUES MAY BE EMPLOYEDT TO INCREASE WATER HOLDING CAPACITY. IRRIGATION PRACTICES MAY BE NECESSARY FOR CERTAIN LANDSCAPING APPLICATIONS. PROVIDE DUST SUPPRESSION TECHNIQUES AS NECESSARY OR WHERE REQUIRED.
5. EASILY ERODIBLE SOILS: SITES WITH EASILY ERODIBLE SOILS SHOULD BE SLOPED TO PROMOTE DRAINAGE AWAY FROM WORK AREAS. DISTURBED SOILS SHOULD BE SEALED WITH A SMOOTH DRUM ROLLER EACH DAY AND PRIOR TO PRECIPITATION. NETWORKS OF HAUL/CONSTRUCTION ROADS SHOULD BE ESTABLISHED AND CONSTRUCTION TRAFFIC RESTRICTED TO USING THEM IN ORDER TO KEEP DISTURBANCE MINIMAL. DISTURBED AREAS SHOULD BE SEEDED AND MULCHED IMMEDIATELY.
6. DEPTH TO SATURATED ZONE/SEASONAL HIGH WATER TABLE: IF GROUNDWATER IS ENCOUNTERED DURING TRENCHING PROCEDURES, THE SEDIMENT-LADEN WATER SHALL BE PUMPED TO AN APPROVED SEDIMENT-REMOVAL FACILITY SUCH AS A SILT FILTER BAG AND DISCHARGED AT A STABILIZED POINT OF DISCHARGE.
7. FROST ACTION: FILL AND/OR BACKFILL SHALL NOT BE PLACED ON FROZEN OR SATURATED GROUND.
8. HYDRIC/HYDRIC INCLUSIONS: REFER TO THE SITE PLANS FOR LOCATION(S) OF WETLANDS AND THE APPLICABLE WETLANDS DELINEATION REPORT FOR DETAILED DESCRIPTION OF WETLANDS PRESENT ON SITE. DISTURBANCE WITHIN WETLAND AREAS IS STRICTLY PROHIBITED WITHOUT PADEP AND/OR ARMY CORP AUTHORIZATION.
9. LOW STRENGTH/LANDSLIDE PRONE: STRUCTURAL FILL SHOULD BE PLACED IN LIFTS NOT EXCEEDING 10 INCHES IN LOOSE THICKNESS AND COMPACTED WITH A VIBRATORY ROLLER HAVING A MINIMUM STATIC WEIGHT OF 10 TONS. A MINIMUM OF 5 OVERLAPPING PASSES OF THE ROLLER SHOULD BE COMPLETED ACROSS THE ENTIRETY OF THE BUILDING PAD AND OTHER STRUCTURAL AREAS. IN AREAS WHERE STRUCTURAL FILL IS PLACED AND COMPACTED WITH HAND-OPERATED COMPACTION EQUIPMENT, A MAXIMUM LOOSE LIFT THICKNESS OF 4 INCHES IS RECOMMENDED. FOLLOWING COMPACTION PROCEDURES, PROOF-ROLLING SHOULD BE PERFORMED USING A LOADED, TANDEM-AXLE DUMP TRUCK. ANY LOOSE OR UNSTABLE AREAS ENCOUNTERED DURING PROOF-ROLLING AND COMPACTION SHOULD BE COMPACTED IN PLACE OR REMOVED AND REPLACED WITH STRUCTURAL FILL (AS DEFINED). THE NATIVE ONSITE STRATUM II SOILS ARE WELL-SUITED FOR USE AS STRUCTURAL FILL AND SHOULD BE USED WHEREVER POSSIBLE, THOUGH QUANTITIES ARE EXPECTED TO BE LIMITED. STRATUM I SOILS MAY BE USED AS STRUCTURAL FILL BUT ARE EXPECTED TO BE MOISTURE SENSITIVE WITH HIGH SILT AND CLAY CONTENT. ALL FILL SHOULD BE PLACED AT, OR DEVIATE NOMINALLY FROM (+/- 2%) THE OPTIMUM MOISTURE CONTENT AS DETERMINED IN ACCORDANCE WITH ASTM D1557 AND COMPACTED TO THE MINIMUM PERCENTAGE OF THE SOIL'S MAXIMUM DRY DENSITY, WHICH IS 95%. CAUTION SHOULD BE EXERCISED TO NOT DISTURB FOUNDATION SUBGRADE SOILS. SHOULD THE SUBGRADE BE DISTURBED, THE SOIL SHOULD BE COMPACTED IN PLACE OR REMOVED UNTIL FIRM SOIL IS ENCOUNTERED AND THE RESULTING EXCAVATION BACKFILLED WITH CONCRETE OR CONTROLLED STRUCTURAL FILL. EVERY EFFORT SHOULD BE MADE TO PREVENT WATER FROM ENTERING OPEN EXCAVATIONS. IT IS RECOMMENDED THAT FOOTING EXCAVATION AND PLACEMENT OF FOUNDATION CONCRETE BE PERFORMED ON THE SAME DAY AND DURING FAIR WEATHER CONDITIONS.
10. SLOW PERCOLATION: MAINTAIN POSITIVE GRADES ON SIDE AND SLOPE AWAY FROM BUILDINGS TO REDUCE PONDING OF WATER. IN-SITU INFILTRATION TESTING WITHIN INFILTRATION BMPS IS REQUIRED AS PART OF THE CRITICAL STAGES OF PCSM IMPLEMENTATION.
11. PIPING: INCORPORATE ANTI-SEEP COLLARS IN SEDIMENT TRAPS AND BASINS AND ON PCSM BASIN DISCHARGE PIPES. INSTALL TRENCH PLUGS (CLAY DIKES) WITHIN STORM DRAINAGE AND UTILITY TRENCHING.
12. POOR SOURCE OF TOPSOIL: PERFORM SOIL TESTING TO DETERMINE APPROPRIATE SUPPLEMENTATION. SOIL AMENDMENTS AND/OR RESTORATION PRACTICES MAY BE NECESSARY IN ORDER TO ESTABLISH PERMANENT VEGETATIVE STABILIZATION.
13. SHRINK-SWELL POTENTIAL: THE SHRINK-SWELL POTENTIAL IS THE EXTENT TO WH

OPERATION AND MAINTENANCE

THE SCHOOL DISTRICT OF LANCASTER IS RESPONSIBLE FOR ALL OWNERSHIP AND MAINTENANCE OF THE PROPOSED PERMANENT STORMWATER MANAGEMENT FACILITIES AS SHOWN ON THIS PLAN.

OVERVIEW OF BEST MANAGEMENT PRACTICE (BMP) FACILITY - MAINTENANCE & INSPECTION GUIDELINES

THE OPERATION AND MAINTENANCE OF PCSM BMP FACILITIES IS VERY SIMILAR TO THE OPERATION AND MAINTENANCE TRADITIONAL STORMWATER MANAGEMENT FACILITIES, LIKE TRADITIONAL FACILITIES, SOME TURF GRASS SHALL BE UTILIZED ON THE TERRESTRIAL (UPLAND) AREAS OF THE BMP FACILITIES. THE EXCEPTION WOULD BE SPECIALIZED MAINTENANCE INVOLVED WITH THE NATIVE HERBACEOUS PLANT SPECIES ESTABLISHED WITHIN THE AQUATIC AREAS OF BMP FACILITIES, BECAUSE OF THE PERIODIC INUNDATION OF STORMWATER AND THE ATTEMPT TO PROMOTE BIORETENTION, IT IS CRITICAL THAT SPECIALIZED PLANTS BE ESTABLISHED TO ENSURE THE FACILITIES DESIGNED INTENTION. THE FIRST TWO YEARS OF VEGETATIVE ESTABLISHMENT IN THE BMP IS THE MOST IMPORTANT TO THE FUNCTION OF THE BMP. AFTER THIS TIME, MAINTENANCE WILL BE MINIMIZED TO THE REGULAR WEEKLY OPERATION INSPECTIONS AND THE OCCASIONAL NEED TO REMOVE WEEDS AND EXOTIC PLANTS.

DURING EARTH MOVING ACTIVITIES, MAINTENANCE SHALL INCLUDE DAILY INSPECTIONS OF ALL STORMWATER & BMP FACILITIES AND THEIR STRUCTURAL COMPONENTS TO ASSURE THEY ARE FUNCTIONING PROPERLY. ALL PIPES, SWALES, BASINS AND OUTLET STRUCTURES SHALL BE KEPT FREE OF ANY SEDIMENT OR DEBRIS THAT WOULD IMPAIR THE FUNCTION OF THE FACILITY. CAREFUL ATTENTION SHALL BE TAKEN AFTER MAJOR STORM EVENTS AS TO THE AMOUNT OF SEDIMENT NEAR THE OUTLET STRUCTURES. PERIODIC REMOVAL OF SEDIMENT IS ESSENTIAL IN THE ESTABLISHMENT OF NEWLY SOWED OR PLANTED VEGETATION.

AFTER CONSTRUCTION HAS CEASED AND THE BMP IS STABILIZED TO ITS DESIGNED CONDITION, CAREFUL MONITORING DURING INSPECTIONS SHALL VERIFY IF THE FILTRATION/INFILTRATION BASINS ARE FUNCTIONING PROPERLY. IF INFILTRATION OF WATER IS NOT TAKING PLACE AFTER A PERIOD OF USE, THE SEDIMENT MUST BE REMOVED FROM THE BASIN BOTTOM, DISPOSED OF PROPERLY AND THE AREA NEEDS TO BE IMMEDIATELY REESTABLISHED TO ITS ORIGINAL SPECIFIED DESIGN INCLUDING THE SOIL MIX AND PLANTINGS. THE USE OF STRAW MULCH OR SECURING APPROVED BIODEGRADABLE EROSION CONTROL MATTING AS NEEDED IS RECOMMENDED WHEN NEW SEEDING IS PERFORMED.

WEEKLY MAINTENANCE WILL INCLUDE SCHEDULED INSPECTIONS AND TURF MOWING AS APPROPRIATE IN AND AROUND THE BMP FACILITIES. REGULAR TURF MOWING TO A HEIGHT OF NOT LESS THAN THREE (3) INCHES INVOLVES MAINLY THE FACILITY BERMS AND SIDE SLOPES AND PREVENTING THE GROWTH OF WEEDS. AFTER TWO YEARS, REGULAR TURF MOWING AND OPERATION INSPECTIONS WILL GOVERN MOST OF THE MAINTENANCE INVOLVED WITH THE BMP'S. CAREFUL OBSERVATION IS NECESSARY TO ENSURE UNWANTED PLANTS DO NOT ESTABLISH THEMSELVES AND DOMINATE THE DESIRED VEGETATIVE COMMUNITY, ESPECIALLY IN THE DESIGNATED BMP PLANTING AREAS. MOST OF THE BMP AREAS THAT HAVE BEEN DESIGNED TO BE PERIODICALLY INUNDATED WITH WATER DURING STORM EVENTS. THESE ZONES ARE ESPECIALLY IMPORTANT TO THE ESTABLISHMENT AND MAINTENANCE OF THE BIO-RETENTION PLANTINGS. THESE ZONES ARE NOT MOWED REGULARLY. HOWEVER, THEY NEED TO BE MOWED AT LEAST ONCE ANNUALLY IN THE EARLY SPRING AT A HEIGHT LESS THEN THREE (3) INCHES. THE CONTROL OF WEEDS AND EXOTIC PLANTS IN THESE ZONES ARE OF THE UTMOST IMPORTANCE. THE MANUAL REMOVAL OF INVASIVE WEEDS AND EXOTIC VEGETATION MOST ADEQUATELY ACHIEVE THIS TASK. THIS IS ESPECIALLY CRITICAL IN THE FIRST TWO YEARS FOR PLANT ESTABLISHMENT AND WILL ENSURE THE EFFECTIVENESS OF THE FACILITY AND REDUCE MAINTENANCE COSTS IN THE LONG RUN. IF MANUAL REMOVAL IS NOT PRACTICAL, THEN "HIGH MOWING" IS ADVISABLE. WHEN WEEDS DOMINATE THE "ZONE" AND BECOME TWELVE TO EIGHTEEN INCHES (12"-18") HIGH, IT IS RECOMMENDED THAT THE "ZONES" BE MOWED DOWN TO SIX TO EIGHT INCHES (6"-8"). THIS WILL HELP WARM UP THE SOIL AND WEAKEN THE COOL SEASON WEEDS TO DETER EXCESSIVE GROWTH AND WILL ENCOURAGE THE SPECIFIED PLANTS IN THE BIO-RETENTION AREA TO BECOME PROPERLY ESTABLISHED. CHEMICAL WEED CONTROL IS NOT RECOMMENDED BUT MAY BE USED IF FEDERAL, STATE AND LOCAL REGULATIONS ARE MET.

DURING AND AFTER CONSTRUCTION ALL BMP FACILITIES SHALL BE MONITORED FOR ESTABLISHMENT PROGRESS AND VERIFY THEIR FUNCTIONALITY ON A DAILY BASIS. WHEN VEGETATION HAS ESTABLISHED ITSELF, WEEKLY INSPECTIONS SHALL BE ADEQUATE. A REGULAR PROGRAM OF INSPECTING THE TERRESTRIAL (UPPER) AND AQUATIC (LOWER) BENCHES OF THE BMP FACILITIES SHALL BE ESTABLISHED. ADDITIONAL INSPECTIONS SHALL OCCUR AFTER ANY MAJOR STORM EVENT TO ENSURE THE INTEGRITY OF THE STORMWATER & BMP FACILITIES. THE PURPOSES FOR THE INSPECTIONS ARE NOT ONLY TO ENSURE THE FACILITIES ARE FUNCTIONING PROPERLY BUT MORE IMPORTANTLY THAT THE FACILITIES ARE OPERATING SAFELY.

BEST MANAGEMENT PRACTICE (BMP) FACILITY NON- STRUCTURAL - REPAIR/REPLACEMENT GUIDELINES

NON-STRUCTURAL ITEMS, WHICH COMPRISE THE BMP'S, ARE NATURAL COMPONENTS SUCH AS VEGETATION, MULCHES AND SOIL. IF NON-STRUCTURAL DAMAGE OCCURS TO ANY PORTION OF THE BMP FACILITIES, THE FOLLOWING GUIDELINES CAN BE UTILIZED.

MULCHES

WHERE APPROPRIATE AND SPECIFIED, MULCH LAYERS SHALL BE PROVIDED TO COVER THE SOIL MEDIUM OF THE PLANTING AREAS. ACCEPTABLE MULCH TYPES WOULD INCLUDE ANY NATURAL SHREDDED AGED WOOD CHIP OR HARDWOOD/BARK MULCH FREE OF FOREIGN MATERIALS. MULCH LAYERS SHOULD BE AT A MINIMUM OF TWO INCHES (2") IN DEPTH BUT NOT MORE THAN FOUR INCHES (4").

SOIL

SOIL MEDIUM WITHIN BMP FACILITIES IS AN ESSENTIAL COMPONENT TO THE EFFECTIVENESS OF THE FACILITIES PURPOSE AND FUNCTIONALITY, SPECIFICALLY IN REGARD TO THE FILTRATION/INFILTRATION OF THE STORMWATER. A SPECIFIC SOIL MEDIUM MIX HAS BEEN SPECIFIED.

THE TOPSOIL MUST BE OF GOOD QUALITY. GOOD TOPSOIL WOULD CONSIST OF A LOAM OR SANDY LOAM SOIL OF UNIFORM COMPOSITION, CONTAINING NO MORE THAN FIVE PERCENT (5%) CLAY, BE LOOSE AND FREE OF OBJECTS SUCH AS ROCKS, ROOTS, ETC. OF LESS THAN TWO INCHES (2") IN DIAMETER. CAREFUL SELECTION OF TOPSOIL SHALL BE DONE SO THAT NO FOREIGN SUBSTANCES, INCLUDING NOXIOUS WEEDS AND GRASSES, ARE WITHIN THE SOIL THAT WOULD HINDER THE GROWTH OF NEW PLANTINGS. ALSO, CHEMICAL SUBSTANCES SHALL NOT BE IN THE SOIL THAT WOULD PROVE TO BE TOXIC TO THE ENVIRONMENT.

PLANTING SPECIFICATIONS

TURF

ANY TURF THAT NEEDS TO BE REPAIRED OR REPLACED BEYOND ITS NORMAL MAINTENANCE CARE SHALL BE CAREFULLY INVESTIGATED PRIOR TO OVER-SEEDING OR APPLYING FERTILIZERS. SEEDING SPECIFICATIONS ARE AVAILABLE ACCORDING TO THE APPROVED EROSION AND SEDIMENTATION CONTROL PLANS. THE USE OF LOW-GROWING, STOLONIFEROUS, TURF TYPE COOL SEASON GRASSES IS RECOMMENDED. FERTILIZATION OF THE TURF AREA SHALL BE IN LIMITED AMOUNTS AND BE APPLIED ONLY AS NECESSARY TO AVOID CONTRIBUTING TO STORM AND GROUND WATER POLLUTION.

SHRUBS, PERENNIALS & ORNAMENTAL GRASSES

IN ADDITION TO THE PLANTING SPECIFICATIONS PROVIDED IN THE APPROVED PLANS, THE FOLLOWING GUIDELINES MUST ALSO BE UTILIZED FOR THE REPLACEMENT OF PLANTING MATERIALS:

1. ALL PLANT MATERIAL SHALL BE INSTALLED IN CONFORMANCE WITH AND MEET THE SPECIFICATIONS OF "THE AMERICAN NURSERY ASSOCIATION" GUIDELINES.
2. ROOTSTOCK OF THE PLANT MATERIAL SHALL BE KEPT MOIST DURING TRANSPORTATION FROM NURSERY TO JOB SITE AND UNTIL PLANTING.
3. WALLS OF THE PLANTING HOLE SHALL BE DUG VERTICAL.
4. THE DIAMETER OF THE PLANTING HOLE SHALL BE SIX INCHES (6") LARGER ON ALL SIDES THAN THAT OF THE PLANT'S ROOT BALL.
5. THE ROOT BALL CROWN SHALL BE PLANTED FLUSH IF NOT SLIGHTLY ABOVE ADJACENT GRADE.
6. BACKFILL AROUND ROOT BALL BY HAND WITH SPECIFIED AMENDED SOIL MEDIUM. BACKFILL IN FOUR INCH (4") LIFTS AND TAMP BY HAND TO ENSURE PROPER COMPACTION.
7. NEVER COVER THE TOP OF THE ROOT BALL WITH SOIL. MOUND SOIL SLIGHTLY AROUND HOLE TO CREATE A WATERING BOWL.
8. COVER PLANTING AREA WITH TWO TO THREE INCHES (2"-3") OF AGED WOOD MULCH AS SPECIFIED.
9. WATER THOROUGHLY.
10. PLANTS IN GENERAL RECEIVE NEEDED NUTRIENTS FROM GOOD SOIL MEDIUM AND DO NOT REQUIRE ADDITIONAL FERTILIZATION. IF FERTILIZER IS USED, ONLY A NATURAL BIODEGRADABLE FERTILIZER IS RECOMMENDED SUCH AS PROCESSED COW MANURE.

CATCH BASINS AND INLETS

CATCH BASINS TRAP SEDIMENT AND SOME OILS THAT CAN POLLUTE WATER BODIES. THEY NEED TO BE INSPECTED AND CLEANED ANNUALLY TO REMOVE ACCUMULATED SEDIMENT, FLUIDS, AND TRASH.

- AVOID OR MINIMIZE SEDIMENT AND POLLUTANT DISCHARGES FROM THE WORK AREA.
- PREVENT PARKING AREAS, ROADS, DRAINAGE SYSTEMS, FACILITIES AND PROPERTY FROM BECOMING POLLUTANT SOURCES
- INSPECT CATCH BASINS AT LEAST ONCE PER YEAR.
- PERIODICALLY INSPECT THE CATCH BASIN AND SURROUNDING AREAS FOR POLLUTANTS SUCH AS LEAKS FROM DUMPSTERS, MINOR SPILLS, AND OIL DUMPING. ACT TO HAVE THE POLLUTANT SOURCE REMOVED.
- CLEAN CATCH BASINS WHEN THEY BECOME ONE THIRD FULL TO MAINTAIN SEDIMENT-TRAPPING CAPACITY.
- CATCH BASIN AND MANHOLE CLEANING SHALL BE PERFORMED IN A MANNER THAT KEEPS REMOVED SEDIMENT AND WATER FROM BEING DISCHARGED BACK INTO THE STORM SEWER.
- CLEAN FILTH MATERIALS FROM CATCH BASINS WHEN DISCOVERED OR REPORTED.
- KEEP THE INLET CLEARED OF DEBRIS AND LITTER.
- WORK INSIDE UNDERGROUND STRUCTURES REQUIRES SPECIAL OSHA-REQUIRED CONFINED SPACE EQUIPMENT AND PROCEDURES. THE MOST PRACTICAL OPTION MAY BE TO CONTRACT WITH A SEWER- CLEANING CONTRACTOR.
- DISPOSAL OF WASTE FROM MAINTENANCE OF DRAINAGE FACILITIES SHALL BE CONDUCTED IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL REGULATIONS.
- REMOVED SEDIMENT MUST BE DISPOSED OF IN THE GARBAGE AS SOLID WASTE. WATER SHALL BE DISPOSED OF IN A SANITARY SEWER AFTER OILS ARE REMOVED USING OIL ABSORBENT MATERIALS OR OTHER MECHANICAL MEANS. USED OIL ABSORBENTS SHALL BE RECYCLED OR DISPOSED ACCORDING THE MANUFACTURE'S INSTRUCTIONS.
- REPAIR ANY DAMAGES THAT PREVENT THE CATCH BASIN FROM FUNCTIONING AS DESIGNED.

MANHOLES

MANHOLES ARE LARGE CYLINDRICAL VAULTS USUALLY SET AT STORM SEWER PIPE CONNECTIONS. UNLESS YOU HAVE OSHA APPROVED TRAINING AND EQUIPMENT, NEVER ENTER A MANHOLE. THERE IS A CONSIDERABLE RISK OF POISONOUS GAS AND INJURY.

- INSPECT THE MANHOLE ONCE PER YEAR. CHECK THE FRAME AND LID FOR CRACKS AND WEAR, SUCH AS ROCKING LIDS OR LIDS MOVED BY TRAFFIC.
- PERIODICALLY INSPECT THE MANHOLE AND SURROUNDING AREAS FOR POLLUTANTS SUCH AS LEAKS FROM DUMPSTERS, MINOR SPILLS, AND OIL DUMPING. TAKE ACTION TO HAVE THE POLLUTANT SOURCE REMOVED.
- CLEAN MANHOLES WHEN THERE IS A BLOCKAGE OF A WATER FLOW PATH. CLEANING SHALL BE PERFORMED IN A WAY THAT ENSURES REMOVED SEDIMENT AND WATER IS NOT DISCHARGED BACK INTO THE STORM SEWER.
- WORK INSIDE UNDERGROUND STRUCTURES REQUIRES SPECIAL OSHA-REQUIRED CONFINED SPACE EQUIPMENT AND PROCEDURES. THE MOST PRACTICAL OPTION MAY BE TO CONTRACT WITH A SEWER- CLEANING CONTRACTOR.
- DISPOSAL OF WASTE FROM MAINTENANCE OF DRAINAGE FACILITIES SHALL BE CONDUCTED IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL REGULATIONS.
- REMOVED SEDIMENT MUST BE DISPOSED IN THE GARBAGE AS SOLID WASTE. WATER SHALL BE DISPOSED OF IN A SANITARY SEWER AFTER OILS ARE REMOVED USING OIL ABSORBENT MATERIALS OR OTHER MECHANICAL MEANS. USED OIL ABSORBENTS SHALL BE RECYCLED OR DISPOSED ACCORDING TO THE MANUFACTURER'S INSTRUCTIONS.
- REPAIR ALL SECURITY AND ACCESS FEATURES SO THEY ARE FULLY FUNCTIONAL. THIS INCLUDES LOCKING LIDS, COVERS, AND LADDER RUNGS.
- REPLACE BROKEN PARTS OR LIDS THAT ROCK OR ARE MOVED BY TRAFFIC.
- SHOULD BE RECYCLED OR DISPOSED ACCORDING TO THE MANUFACTURER'S INSTRUCTIONS.

STORM PIPE

STORM SEWER PIPES CONVEY STORMWATER. PIPES ARE BUILT FROM MANY MATERIALS AND ARE SOMETIMES PERFORATED TO ALLOW STORMWATER TO INFILTRATE INTO THE GROUND. STORM PIPES ARE CLEANED TO REMOVE SEDIMENT OR BLOCKAGES WHEN PROBLEMS ARE IDENTIFIED. STORM PIPES MUST BE CLEAR OF OBSTRUCTIONS AND BREAKS TO PREVENT LOCALIZED FLOODING.

PIPES ARE DIFFICULT TO INSPECT REQUIRING SPECIAL EQUIPMENT AND TRAINING. USUALLY, IF A PROBLEM OCCURS THE OWNER NEEDS TO CALL A SEWER OR PLUMBING CONTRACTOR TO INSPECT, REPAIR OR CLEAN PIPELINES.

- CLEAN PIPES WHEN SEDIMENT DEPTH IS GREATER THAN 20 PERCENT OF PIPE DIAMETER. WHEN CLEANING A PIPE, MINIMIZE SEDIMENT AND DEBRIS DISCHARGES FROM PIPES TO THE STORM SEWER. INSTALL DOWNSTREAM DEBRIS TRAPS (WHERE APPLICABLE) BEFORE CLEANING AND THEN REMOVE MATERIAL.
- GENERALLY, USE MECHANICAL METHODS TO REMOVE ROOT OBSTRUCTIONS FROM INSIDE STORM SEWER PIPES. DO NOT PUT ROOT-DISSOLVING CHEMICALS IN STORM SEWER PIPES. IF THERE IS A PROBLEM, REMOVE THE VEGETATION OVER THE LINE.
- WORK INSIDE UNDERGROUND STRUCTURES REQUIRES SPECIAL OSHA-REQUIRED CONFINED SPACE EQUIPMENT AND PROCEDURES. THE MOST PRACTICAL OPTION MAY BE TO CONTRACT WITH A SEWER-- CLEANING CONTRACTOR.
- SEDIMENT AND DEBRIS FROM PIPES SHALL BE DISPOSED IN THE GARBAGE AS SOLID WASTE. PICK OUT ANY ROCKS FIRST.
- REPAIR OR REPLACE PIPES WHEN A DENT OR BREAK CLOSES MORE THAN 20 PERCENT OF THE PIPE DIAMETER.
- REPAIR OR REPLACE PIPES DAMAGED BY RUST OR DETERIORATION.

TRASH RACKS

- INSPECT TRASH RACKS FOR DAMAGED OR BROKEN SECTIONS. REPAIR AS NEEDED.
- INSPECT AND REMOVE TRASH AND DEBRIS BEFORE, DURING, AND AFTER STORM EVENTS TO ENSURE IT IS FUNCTIONING PROPERLY.

GENERAL NOTES:

1. THE POST CONSTRUCTION STORMWATER PLAN FOR THE SUBJECT TRACT AS APPROVED BY THE MUNICIPALITY, PROVIDES FOR DETENTION, RETENTION, INFILTRATION AND/OR TREATMENT OF STORMWATER WITHIN THE CONFINES OF THE PROPERTY.
2. THE MUNICIPALITY REQUIRES THAT STORMWATER MANAGEMENT FACILITIES AND BMPs AS SHOWN ON THE PLAN BE CONSTRUCTED AND ADEQUATELY MAINTAINED BY THE OWNER, THEIR SUCCESSORS, HEIRS AND/OR ASSIGNS.
3. THE ON-SITE STORMWATER MANAGEMENT FACILITIES AND BMPs SHALL BE CONSTRUCTED BY THE OWNER, THEIR SUCCESSORS, HEIRS AND/OR ASSIGNS IN ACCORDANCE WITH THE TERMS, CONDITIONS, DETAILS, AND SPECIFICATIONS IDENTIFIED IN THE PLAN.
4. THE OWNER, THEIR SUCCESSORS, HEIRS AND/OR ASSIGNS SHALL MAINTAIN THE STORMWATER MANAGEMENT FACILITIES AND BMPs IN GOOD WORKING CONDITION, ACCEPTABLE TO THE MUNICIPALITY SO THAT THEY ARE PERFORMING THEIR DESIGN FUNCTIONS.
5. THE OWNER, THEIR SUCCESSORS, HEIRS AND/OR ASSIGNS HEREBY GRANT PERMISSION TO THE MUNICIPALITY, ITS AUTHORIZED AGENTS AND EMPLOYEES, UPON PRESENTATION OF PROPER IDENTIFICATION, TO ENTER UPON THE PROPERTY AT REASONABLE TIMES, AND TO INSPECT THE STORMWATER MANAGEMENT FACILITIES AND BMPs WHENEVER THE MUNICIPALITY DEEMS NECESSARY. THE PURPOSE OF THE INSPECTION IS TO ASSURE SAFE AND PROPER FUNCTIONING OF THE FACILITIES.
6. AT A MINIMUM, MAINTENANCE INSPECTIONS SHALL BE PERFORMED IN ACCORDANCE WITH THE SCHEDULE SPECIFIED IN THE BMP OPERATIONS AND MAINTENANCE PLAN.
7. IN THE EVENT THE OWNER, THEIR SUCCESSORS, HEIRS AND/OR ASSIGNS FAIL TO MAINTAIN THE STORMWATER MANAGEMENT FACILITIES AND BMPs IN GOOD WORKING CONDITION ACCEPTABLE TO THE MUNICIPALITY, THE MUNICIPALITY SHALL GIVE PROPER NOTICE TO OWNER SETTING FORTH THE SPECIFICS OF SUCH FAILURE TO MAINTAIN, THE REMEDIATION REQUIRED, AND DEADLINE TO COMPLETE ANY SUCH REMEDIAL ACTION.
8. THE OWNER, THEIR SUCCESSORS, HEIRS AND/OR ASSIGNS WILL PERFORM MAINTENANCE IN ACCORDANCE WITH THE BMP OPERATIONS AND MAINTENANCE PLAN FOR THE STORMWATER MANAGEMENT FACILITIES AND BMPs, INCLUDING SEDIMENT REMOVAL AS OUTLINED ON THE APPROVED PLAN.
9. ALL CONVEYANCE AND DETENTION FACILITIES SHALL BE KEPT FREE FROM ANY DEBRIS OR OTHER OBSTRUCTION AND IN ORIGINAL DESIGN CONDITION.

BMP OPERATION AND MAINTENANCE SCHEDULE

*REFER TO THE PCSM PLAN FOR A GRAPHIC DEPICTION OF THE LOCATION OF ALL BELOW FACILITIES.

PRE TREATMENT/GNOUT -WATER QUALITY STRUCTURES, MAINTENANCE SCHEDULE (I I-3, MH I-5, I I-7, I I-9, I I-11, I I-13, I I-14, I I-16).

INSPECTION ACTIVITIES

- INSPECT AFTER EVERY RAIN EVENT GREATER THAN 0.50" OF RAINFALL BUT NO LESS THAN MONTHLY FROM MARCH TO OCTOBER

MAINTENANCE ACTIVITIES

- CLEAN OUT AND LEGALLY DISPOSE OF WASTE AT A MINIMUM OF EVERY MARCH.
- MAINTAIN PER MANUFACTURER'S REQUIREMENTS AND DETERMINE SCHEDULE ONCE INSTALLED.

SCM-1, SUBSURFACE INFILTRATION BASIN MAINTENANCE SCHEDULE:

INSPECTION & MAINTENANCE ACTIVITIES

- INSPECTIONS SHOULD OCCUR AT REGULAR INTERVALS AND MAINTAINED WHEN NECESSARY TO ENSURE OPTIMUM PERFORMANCE. THE RATE AT WHICH THE SYSTEM COLLECTS POLLUTANTS WILL DEPEND MORE HEAVILY ON SITE ACTIVITIES.
- ONGOING QUARTERLY INSPECTIONS OF THE ACCUMULATED SEDIMENT ARE RECOMMENDED AT A MINIMUM. SEDIMENT DEPOSITION AND TRANSPORT MAY VARY FROM YEAR TO YEAR AND QUARTERLY INSPECTIONS WILL HELP INSURE THAT SYSTEMS ARE CLEANED OUT AT THE APPROPRIATE TIME.
- INSPECTIONS SHOULD BE PERFORMED MORE OFTEN IN THE WINTER MONTHS IN CLIMATES WHERE SANDING OPERATIONS MAY LEAD TO RAPID ACCUMULATIONS OR IN EQUIPMENT WASH DOWN AREAS.
- INSPECT AND MAINTAIN ALL PRETREATMENT / WATER QUALITY STRUCTURES FOR SEDIMENT AND DEBRIS AFTER ALL RAIN EVENTS, AND PERIODICALLY TO ENSURE THEY REMAIN CLEAN AND FREE OF DEBRIS.
- SYSTEM SHOULD BE CLEANED WHEN INSPECTION REVEALS THAT ACCUMULATED SEDIMENT OR TRASH IS CLOGGING THE DISCHARGE ORIFICE.
- ACCUMULATED SEDIMENT AND TRASH CAN BE EVACUATED THROUGH THE CLEANOUTS, PRETREATEMENT STRUCTURES OR OUTLET CONTROL STRUCTURE.
- DEWATERING OF THE FACILITY SHOULD OCCUR WITH 72 HOURS OF A RAIN EVENT. IF STANDING WATER IS OBSERVED IN THE FACILITY FOR MORE THAN 72 HOURS AFTER A RAIN EVENT AN ENGINEER OR QUALIFIED PROFESSIONAL SHALL BE CONSULTED TO DISCUSS FURTHER MAINTENANCE ACTIVITIES.
- INSPECT AND ENSURE THAT THE VALVE IN OCS-1 REMAINS CLOSED AT ALL TIMES UNLESS DIRECTED BY THE CITY OF LANCASTER, LANCASTER COUNTY CONSERVATION DISTRICT IN COORDINATION WITH THE ENGINEER OF RECORD FOR THE SCHOOL DISTRICT OF LANCASTER.
- GATE VALVES ARE TO REMAIN CLOSED. IF THE CITY OF LANCASTER INSPECTS THE FACILITIES AND THE GATE VALVES ARE OPEN OUTSIDE OF SPECIFIED TIMES, THE PROPERTY OWNER WILL BE CONSIDERED NON-COMPLIANT.

LONG TERM MAINTENANCE

- FACILITY RENOVATION - DEPENDING ON CONDITION AND PERFORMANCE OF FACILITY, REPLACE AS NEEDED AND/OR DETERMINED BY THE CITY ENGINEER.

NOTES:

1. ALL NON-REUSABLE DEBRIS THAT IS REMOVED FROM THE ABOVE BMP'S AS A RESULT OF MAINTENANCE ACTIVITIES SHOULD BE DISPOSED OF IN A LANDFILL OR IN ACCORDANCE WITH THE RECYCLING OR DISPOSAL OF MATERIALS NOTES ON THIS SHEET. INSPECTIONS SHALL BE DOCUMENTED IN INSPECTION REPORTS OUTLINING MAINTENANCE COMPLETED, MAINTENANCE NEEDED, PHOTOS, ETC. UPON REQUEST, INSPECTION REPORTS SHALL BE SUBMITTED TO THE CITY WITHIN 30 DAYS. WHERE AN NPDES PERMIT FOR THE PROJECT REQUIRES THAT SWM FACILITIES BE INSTALLED, THE O&M PLAN SHALL REQUIRE ANNUAL WRITTEN REPORTING OF THE INSPECTION AND MAINTENANCE OF THOSE FACILITIES AND THE ANNUAL REPORTS SHALL BE PROVIDED TO THE CITY. LID PRACTICES SHALL BE INCLUDED IN THE ANNUAL WRITTEN REPORT. FAILURE TO PROVIDE SUCH REPORTS MAY RESULT IN ENFORCEMENT AND PENALTIES BY THE CITY.
2. REGULAR INSPECTION OF THE SWM FACILITIES SHOULD OCCUR TO ASSURE PROPER IMPLEMENTATION OF BMP'S MAINTENANCE AND CARE. BMP'S SHOULD BE INSPECTED BY A QUALIFIED PERSON. COMPLETE PAPERWORK OF O&M PROCEDURES PERFORMED, INCLUDING DATE STAMPED PHOTOS, WHICH MAY INCLUDE THE LANDOWNER, OR THE OWNER'S DESIGNEE ACCORDING TO THE FOLLOWING MINIMUM FREQUENCIES:
   - 2.1. ANNUALLY FOR THE FIRST FIVE YEARS
   - 2.2. ONCE EVERY THREE YEARS THEREAFTER
   - 2.3. DURING OR IMMEDIATELY AFTER THE CESSATION OF A TEN-YEAR OR GREATER STORM.
3. SEE RECORDED STORMWATER OPERATION AND MAINTENANCE (O&M) AGREEMENT FOR ADDITIONAL REQUIREMENTS.
4. AS SPECIFIED IN THE O&M AGREEMENT PURSUANT TO SECTION 206-602. IN THE INSTANCE THAT THE O&M AGREEMENT AND THE SCHEDULE SET FORTH IN 2.1., 2.2., AND 2.3., ABOVE, ARE INCONSISTENT, THE O&M AGREEMENT SHALL CONTROL.
5. INSPECTIONS SHALL BE DOCUMENTED IN INSPECTION REPORTS OUTLINING THE MAINTENANCE COMPLETED, MAINTENANCE NEEDED, PHOTOS, ETC. UPON REQUEST, INSPECTION REPORTS SHALL BE SUBMITTED TO THE CITY WITHIN 30 DAYS. AN NPDES PERMIT FOR THE PROJECT REQUIRES STORMWATER MANAGEMENT FACILITIES ARE INSTALLED, THE O&M PLAN REQUIRES ANNUAL WRITTEN REPORTING OF THE INSPECTION AND MAINTENANCE OF THOSE FACILITIES AND THE ANNUAL WRITTEN REPORT SHALL BE PROVIDED TO THE CITY. LID PRACTICES SHALL BE INCLUDED IN THE ANNUAL WRITTEN REPORT. FAILURE TO PROVIDE SUCH REPORTS MAY RESULT IN ENFORCEMENT AND PENALTIES BY THE CITY.

REVISIONS PER:	DATE:	BY:
1. COL/LCCD COMMENTS	3/28/25	EWB
2. -	-	-
3. -	-	-
4. -	-	-
5. -	-	-

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COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — ELIZABETH WERNER BALDWIN — ENGINEER — PE080729

PENNSYLVANIA — REGISTERED LANDSCAPE ARCHITECT

STORMWATER MANAGEMENT PLAN

SUBJECT:
O&M NOTES
MCCASKEY HIGH SCHOOL
MCCASKEY HIGH SCHOOL STADIUM RENOVATIONS
CITY OF LANCASTER - LANCASTER COUNTY - PENNSYLVANIA

CLIENT:
MM ARCHITECTS
214 NORTH DUKE STREET
LANCASTER, PA 17602
(717) 393-3211

MANAGER:	HDC	DATE:	February 6, 2025
DESIGNER:	EWB	PROJECT NO.	AZ202-015
DRAWN BY:	JMT	SCALE:	AS SHOWN

DRAWING NO.
06 OF 53

DRAWING: C:\Users\jmtoedter\DC\ACCDocs\ELA Group\AZ202-015 McCaskey Stadium Renovations\Project Files\CAD Data\Land Development\LD-PRELIMCOVER-CURRENT.dwg - PLOTTED: Apr 02, 2025 2:16 pm

ADJACENT PROPERTY OWNERS

#1 511 N. FRANKLIN ST
N/F: TREASURES MARKETS PROPERTIES
ACCT #: 3361786200000
PIN #: 336-17862
DEED DOC #: 6511865

#2 1231 GROFFTOWN ROAD
N/F: MARIA I. CARCAMO
ACCT #: 3366686000000
PIN #: 336-66860
DEED DOC #: 6246409

#3 1014 LEHIGH AVE
N/F: EMILIO J. LOPEZ COLLADO
ACCT #: 3364352300000
PIN #: 336-43523
DEED DOC #: 6498223

#4 1012 LEHIGH AVE
N/F: HARRISON Q. VU
ACCT #: 3363782400000
PIN #: 336-37824
DEED DOC #: 6011369

#5 1008 LEHIGH AVE
N/F: HUYNH T. NGUYEN
ACCT #: 3363511900000
PIN #: 336-35119
DEED DOC #: 6028616

#6 1006 LEHIGH AVE
N/F: LINH KIM TRAN
ACCT #: 3363231500000
PIN #: 336-32315
DEED DOC #: 6026501

#7 1002 LEHIGH AVE
N/F: THOMAS M. LYMAN
ACCT #: 3363691800000
PIN #: 336-36918
DEED DOC #: 6091499

#8 950 LEHIGH AVE
N/F: QUILVIO POLANCO
ACCT #: 3362129500000
PIN #: 336-21295
DEED DOC #: 2024679463

#9 948 LEHIGH AVE
N/F: MIGUEL A RODRIGUEZ GUZMAN
ACCT #: 3361829100000
PIN #: 336-18291
DEED DOC #: 6301070

#10 944 LEHIGH AVE
N/F: QUANG M TRAN
ACCT #: 3361558700000
PIN #: 336-15587
DEED DOC #: 5825187

#11 942 LEHIGH AVE
N/F: QUANG DUY DO
ACCT #: 3361298300000
PIN #: 336-12983
DEED DOC #: 6218896

#12 938 LEHIGH AVE
N/F: NGOC HANG NGUYEN
ACCT #: 3361027900000
PIN #: 336-10279
DEED DOC #: 5803095

#13 936 LEHIGH AVE
N/F: ARATI D. CORSO-JONES
ACCT #: 3360757500000
PIN #: 336-07575
DEED DOC #: 05716977

#14 932 LEHIGH AVE
N/F: THI HUE TU
ACCT #: 3360497100000
PIN #: 336-04971
DEED DOC #: 6134972

#15 930 LEHIGH AVE
N/F: RAFAEL MALDONADO
ACCT #: 3361408400000
PIN #: 336-14084
DEED DOC #: 05632305

#16 924 LEHIGH AVE
N/F: HUONG NHAM THUAT
ACCT #: 3369605800000
PIN #: 336-96058
DEED DOC #: 5277697

#17 335 N. BROAD STREET
N/F: JEREMY D. SAUDER
ACCT #: 3367866700000
PIN #: 336-78667
DEED DOC #: 6754621

#18 860 LEHIGH AVE
N/F: RUSSELL L. CARL
ACCT #: 3366520500000
PIN #: 336-65205
DEED DOC #: 5225695

#19 858 LEHIGH AVE
N/F: TUAN BUI
ACCT #: 3366270100000
PIN #: 336-62701
DEED DOC #: 6225702

#20 854 LEHIGH AVE
N/F: DEBRA A. & MICHAEL H. MCKINNEY
ACCT #: 3366029800000
PIN #: 336-60298
DEED DOC #: 5144375

#21 852 LEHIGH AVE
N/F TARA L. SCHLEY
ACCT #: 3365789400000
PIN #: 336-57894
DEED DOC #: 05510939

#22 848 LEHIGH AVE
N/F ELIZABETH YOUNG
ACCT #: 3365539000000
PIN #: 336-55390
DEED DOC #: 20246806714

#23 846 LEHIGH AVE
N/F TRI TRAN
ACCT #: 3365298700000
PIN #: 336-52987
DEED DOC#: 05784147

#24 842 LEHIGH AVE
N/F ANDRE J. JOHNSON
ACCT #: 3365048300000
PIN #: 336-50483
DEED DOC#: 05483750

#25 840 LEHIGH AVE
N/F ERIC M. FENSTERMAKER
ACCT #: 3364807900000
PIN #: 336-48079
DEED DOC#: 05704256

#26 836 LEHIGH AVE
N/F JUDITH A. & BRUCE T. MCCLOUD
ACCT #: 3364567500000
PIN #: 336-45675
DEED DOC#: 3619282

#27 834 LEHIGH AVE
N/F GUILLERMO R. RODRIGUEZ
ACCT #: 3364317200000
PIN #: 336-43172
DEED DOC#: 68330292

#28 830 LEHIGH AVE
N/F MEGAN A. BLACKMON
ACCT #: 3364076800000
PIN #: 336-40768
DEED DOC#: 6193084

#29 828 LEHIGH AVE
N/F RAQUEL J. Y. RODRIGUEZ PABLO
ACCT #: 3363826400000
PIN #: 336-38264
DEED DOC#: 5367060

#30 824 LEHIGH AVE
N/F LINA THAI
ACCT #: 3363586000000
PIN #: 336-35860
DEED DOC#: 6534551

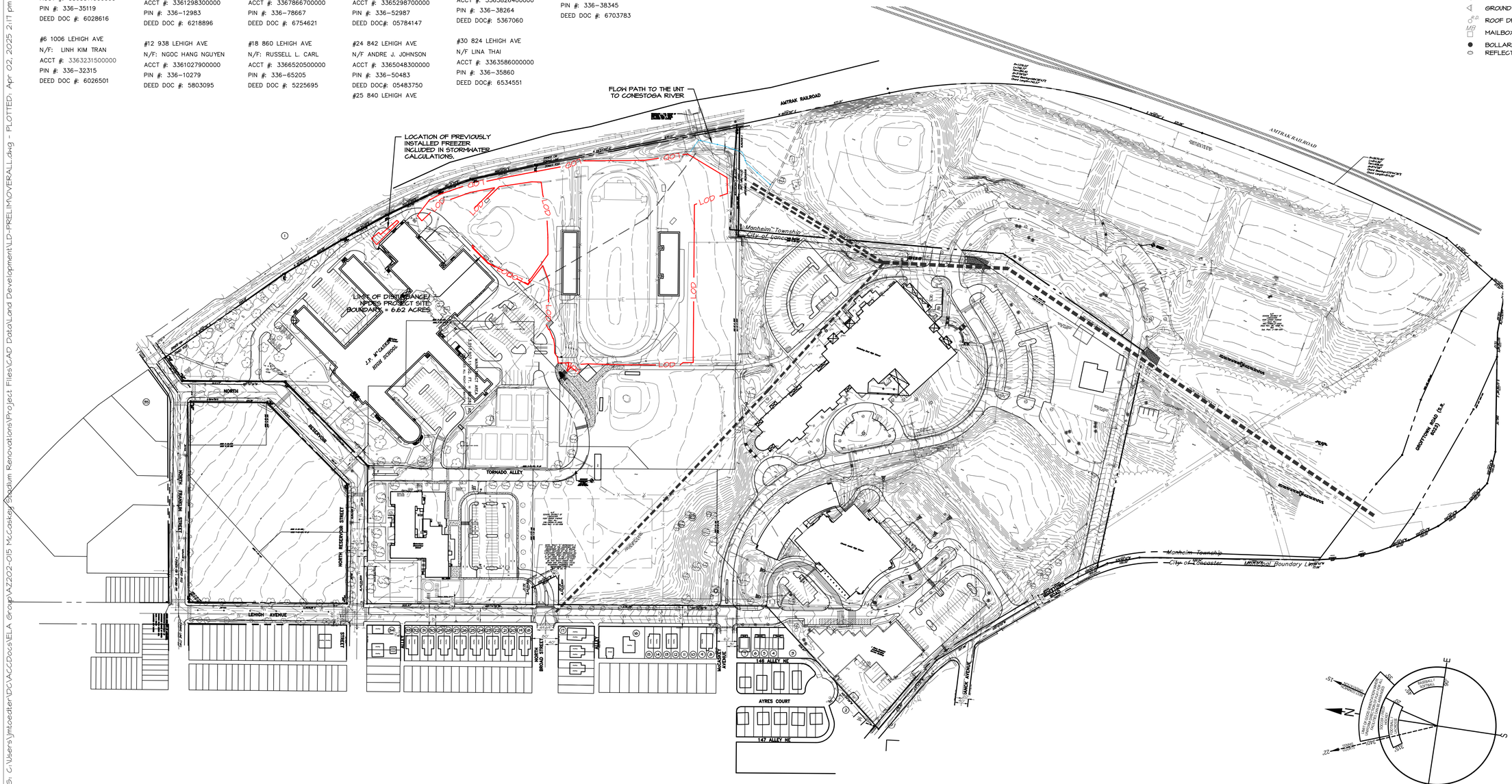
#31 822 LEHIGH AVE
N/F RAY D. FREDERICK
ACCT #: 3363345700000
PIN #: 336-33457
DEED DOC#: 5132562

#32 818 LEHIGH AVE
N/F REMONA J. NELSON
ACCT #: 3363095300000
PIN #: 336-30953
DEED DOC#: 5319767

#33 816 LEHIGH AVE
N/F PATRICIA A. BOOKS
ACCT #: 3362854900000
PIN #: 336-28549
DEED DOC#: 6097885

#34 347 N. RESERVOIR ST
N/F: JOHN R. MOORE, JR
ACCT #: 3362057800000
PIN #: 336-20578
DEED DOC #:20250005475

#35 470 N. FRANKLIN ST
N/F: PATRIOT ELECTRONICS, LLC
ACCT #: 3363834500000
PIN #: 336-38345
DEED DOC #: 6703783



EXISTING LEGEND

- ADJOINER PROPERTY LINE
- PROPERTY LINE (Iron Pin, Rebar / Concrete Monument)
- RIGHT-OF-WAY LINE
- CENTERLINE
- EASEMENTS
- 355 INDEX CONTOUR
- 352 INTERMEDIATE CONTOUR
- X 391.0 SPOT ELEVATION
- CURB LINE
- EDGE OF PAVEMENT (E.O.P.)
- MIN. BLDG SETBACK LINE
- OVERHEAD ELECTRIC (Utility Pole OH; Electric Meter EM)
- UNDERGROUND ELECTRIC (Utility Pole UE; Electric Transformer ET)
- UNDERGROUND TELEPHONE (Utility Pole UT; Manhole T; Telephone Box)
- GAS LINE (Gas Valve GV; Gas Meter G)
- SANITARY SEWER LINE (Clean Out C.O.; S Manhole)
- SANITARY FORCE MAIN (FM Manhole)
- WATER LINE (WM Water Meter; W Water Valve; WV Fire Hydrant)
- STORM DRAINAGE PIPING (Headwall; D Manhole; Inlet; Endwall; Rip Rap)
- FENCE
- ZONING LINE
- GUIDE RAIL
- EDGE OF WATER (STREAM)
- FEMA 100 YEAR FLOODPLAIN
- LOD LIMIT OF DISTURBANCE
- TREE LINE
- SIGN
- WELL
- LIGHT POLE
- GROUND LIGHT
- R.D. ROOF DRAIN
- MB MAILBOX
- BOLLARD
- REFLECTOR POST
- DECIDUOUS TREES
- CONIFEROUS TREE
- TRAFFIC SIGNAL BOX
- TRAFFIC SIGNAL POLE
- TRAFFIC SIGNAL MAST

SCALE IN FEET: 1" = 150'
0 15 30 60 90

REVISIONS PER:	DATE:	BY:
1. COL/LCCD COMMENTS	3/28/25	EWB
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COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — ELIZABETH WERNER BALDWIN — ENGINEER — PE080726

PENNSYLVANIA — REGISTERED LANDSCAPE ARCHITECT — REGISTRATION NUMBER LA001 EXP. 12

STORMWATER MANAGEMENT PLAN
SUBJECT:
OVERALL & EXISTING CONDITIONS PLAN
MCCASKEY HIGH SCHOOL
MCCASKEY HIGH SCHOOL STADIUM RENOVATIONS
CITY OF LANCASTER - LANCASTER COUNTY - PENNSYLVANIA
CLIENT:
MM ARCHITECTS
214 NORTH DUKE STREET
LANCASTER, PA 17602
(717) 393-3211

MANAGER:	HDC	DATE:	February 6, 2025
DESIGNER:	EWB	PROJECT NO.	AZ202-015
DRAWN BY:	JMT	SCALE:	1" = 150'

DRAWING NO.
07 OF 53

DRAWING: C:\Users\ntoaster\DC\ACCDocs\ELA Group\AZ202-015 McCaskey Stadium Renovations\Project Files\CAD Data\Land Development\LD-PRELIM\OVERALL.dwg - PLOTTED: Apr 02, 2025 2:17 pm

DEMOLITION LEGEND

- LOD — LIMIT OF DISTURBANCE
- TPF — TREE PROTECTION FENCING
- TP-1 — TEST PIT

SOILS LEGEND

- Uc — URBAN LAND

DEMOLITION NOTES

1. EXISTING PIPING SYSTEM MAY REMAIN IN PLACE WHERE IT DOES NOT AFFECT THE NEW WORK / SYNTHETIC TURF FIELD AGGREGATE BASE AND UNDERDRAIN SYSTEM. ALL EXISTING STORM SEWERS ABANDONED IN PLACE SHALL BE CAPPED / PLUGGED AND SHOWN ON THE CONTRACTOR'S RECORD AS-BUILT DRAWINGS.
2. PROVIDE CLEAN FILL AND BACKFILL ALL VOIDS RESULTING FROM DEMOLITION / REMOVAL TO NEW SYNTHETIC TURF FIELD SUBGRADE ELEVATION. BACKFILL IN LIFTS AND THOROUGHLY COMPACT EACH LIFT TO PREVENT FUTURE SETTLEMENT.
3. STRIP TOPSOIL LAYER SEPARATE FROM UNDERLYING TOPSOIL AND STOCKPILE ON SITE AT A LOCATION OR LOCATIONS, DIRECTED BY OWNER OR AS DESIGNATED ELSEWHERE ON THESE DRAWINGS. REMOVE ALL EXCESS SUBSOIL MATERIALS FROM SITE NOT REQUIRED AS PART OF THE WORK.
4. CONSTRUCTION TRAFFIC MUST ENTER AND EXIT THROUGH THE APPROVED ROCK CONSTRUCTION ENTRANCE. CONTRACTOR SHALL REMOVE (AND REPLACE) EXISTING GATES, GATE POSTS, AND FENCING AS REQUIRED TO GAIN ACCESS FOR CONSTRUCTION EQUIPMENT. RESTORE EXISTING PAVEMENTS DAMAGED BY CONSTRUCTION ACTIVITIES, INCLUDING COMPLETE REPLACEMENT WHEN REQUIRED, AND RESTORE / REPLACE EXISTING LAWN AREAS AND OTHER IMPROVEMENTS DAMAGED BY CONSTRUCTION ACTIVITIES.
5. LIMIT OF FENCE / FENCE POST FOUNDATION REMOVAL SHOWN ON THIS DRAWING IS "GRAPHIC" APPROXIMATE. REMOVE FENCE TO NEAREST POST BEYOND THE LIMIT OF NEW CONSTRUCTION AS PRACTICAL TO MEET THE INTENT AND SCOPE OF THE NEW PAVING WORK.

EXISTING LEGEND

- ADJOINER PROPERTY LINE
- PROPERTY LINE (Iron Pin, Rebar / Concrete Monument)
- RIGHT-OF-WAY LINE
- CENTERLINE
- EASEMENTS
- INDEX CONTOUR (355)
- INTERMEDIATE CONTOUR (352)
- SPOT ELEVATION (X 391.0)
- CURB LINE
- EDGE OF PAVEMENT (E.O.P.)
- MIN. BLDG SETBACK LINE
- OVERHEAD ELECTRIC (Utility Pole, OH, Electric Meter, EM)
- UNDERGROUND ELECTRIC (Utility Pole, UE, Electric Transformer, ET)
- UNDERGROUND TELEPHONE (Utility Pole, UT, Manhole, T, Telephone Box, TB)
- GAS LINE (GV, Gas Valve, G, Gas Meter)
- SANITARY SEWER LINE (C.O., Clean Out, S, Manhole)
- SANITARY FORCE MAIN (S, Manhole, FM, AV)
- WATER LINE (WM, Water Meter, W, Water Valve, FH, Fire Hydrant)
- STORM DRAINAGE PIPING (Headwall, Manhole, Inlet, Endwall, Rip Rap)
- FENCE
- ZONING LINE
- GUIDE RAIL
- EDGE OF WATER (STREAM)
- FEMA 100 YEAR FLOODPLAIN
- TREE LINE
- SIGN
- WELL
- LIGHT POLE
- GROUND LIGHT
- ROOF DRAIN (R.D.)
- MAILBOX (MB)
- BOLLARD
- REFLECTOR POST
- DECIDUOUS TREES
- CONIFEROUS TREE
- TRAFFIC SIGNAL BOX
- TRAFFIC SIGNAL POLE
- TRAFFIC SIGNAL MAST

SURVEYOR'S NOTES:

1. BENCHMARK/ PRIMARY CONTROL POINT: MAG NAIL SET NEAR EDGE OF PAVEMENT NEAR SOUTH WEST OF FIELD TRACK AND NORTH OF CONCESSIONS STAND A DISTANCE OF 25.08' AS SHOWN. ELEVATION= 304.36' NAVD 88 DATUM.

SCALE IN FEET: 1" = 30'

0 15 30 60 90

REVISIONS PER:	DATE:	BY:
1. COL/LCCD COMMENTS	3/28/25	EWB
2. -	-	-
3. -	-	-
4. -	-	-
5. -	-	-

ELA SPORT
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COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — ELIZABETH WERNER BALDWIN — ENGINEER — PE080729 — COMMONWEALTH OF PENNSYLVANIA

PENNSYLVANIA — HIGH PERFORMANCE — REGISTERED LANDSCAPE ARCHITECT — LICENSURE NUMBER RA-PE-E — EXPIRATION DATE

STORMWATER MANAGEMENT PLAN

SUBJECT:

EXIST. CONDITIONS & DEMOLITION PLAN

MCCASKEY HIGH SCHOOL

MCCASKEY HIGH SCHOOL STADIUM RENOVATIONS

CITY OF LANCASTER - LANCASTER COUNTY - PENNSYLVANIA

CLIENT:

MM ARCHITECTS

214 NORTH DUKE STREET

LANCASTER, PA 17602

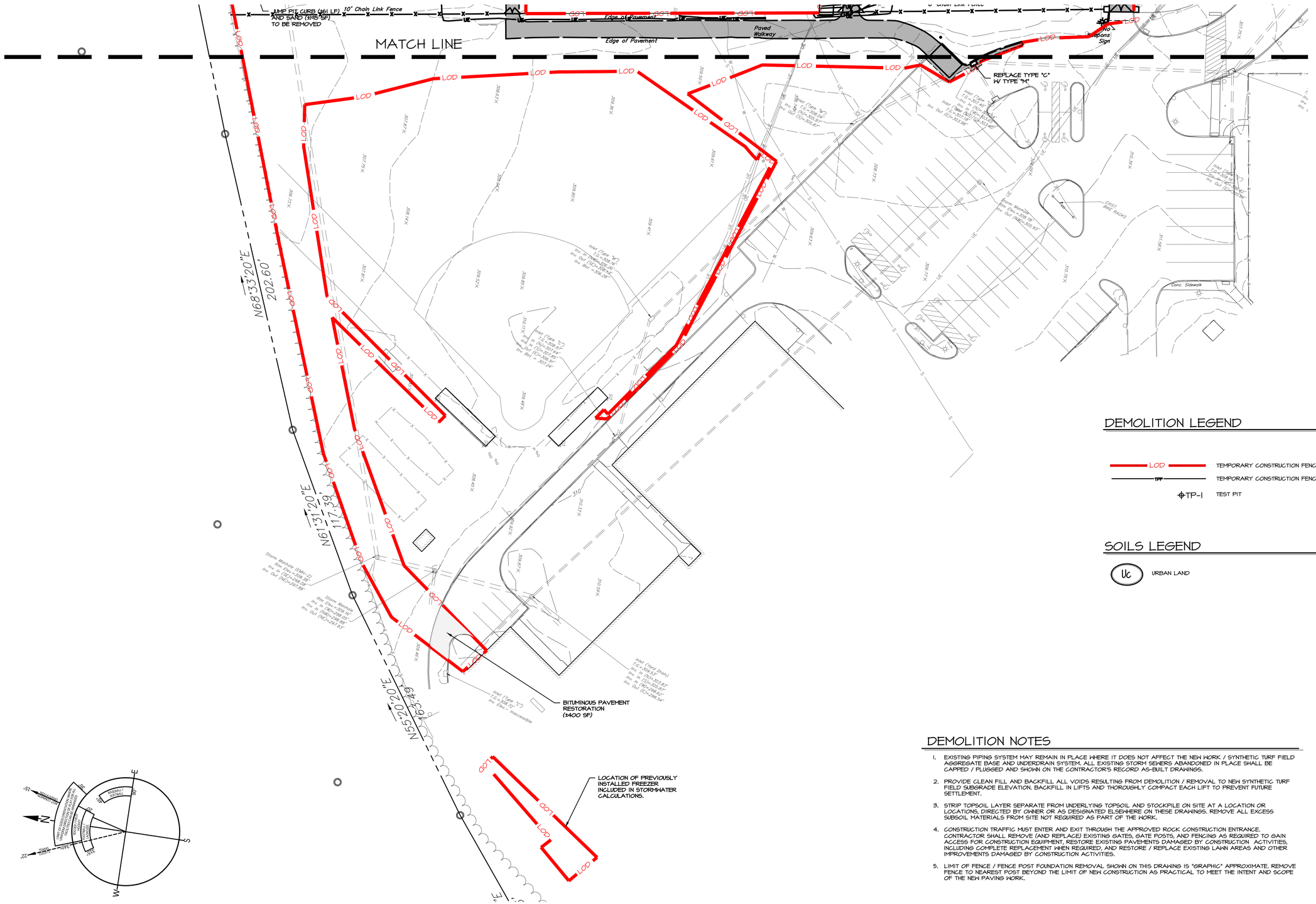
(717) 393-3211

MANAGER:	HDC	DATE:	January 27, 2025
DESIGNER:	EWB	PROJECT NO.	AZ202-015
DRAWN BY:	JMT	SCALE:	1" = 30'

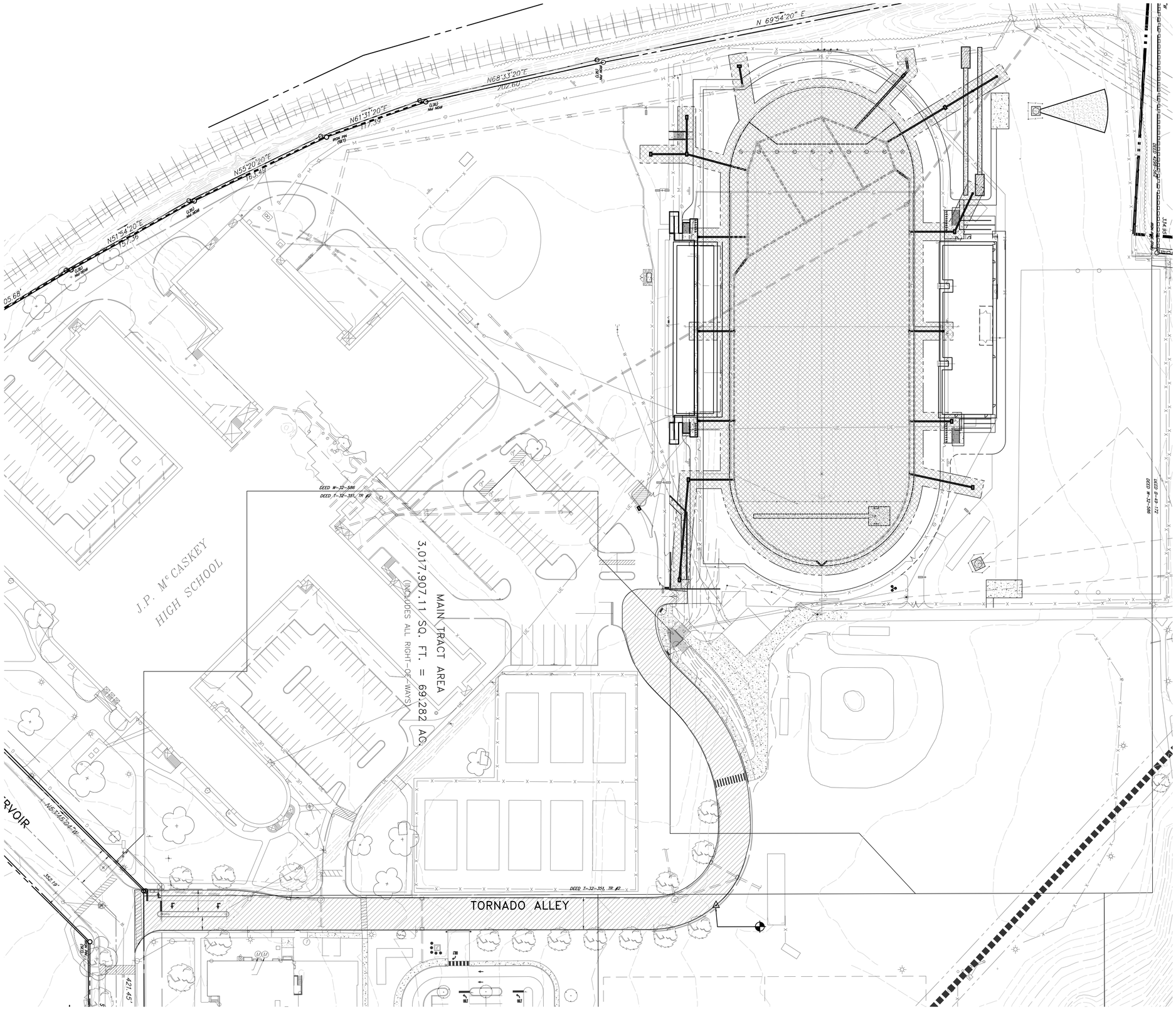
DRAWING NO.

08 OF 53

DRAWING: C:\Users\ewawerner\DC\ACCDocs\ELA Group\AZ202-015 McCaskey Stadium Renovations\Project Files\CAD Data\Land Development\LD-PRELIMDEMO.dwg - PLOTTED: Apr 02, 2025 3:32 pm


MATCH LINE
JMP PIT CURB (461 LF) AND SAND (4185 SF) TO BE REMOVED
10' Chain Link Fence
Edge of Pavement
Paved Walkway
No Outlet Sign
REPLACE TYPE "C" W/ TYPE "M"
LOD
N68°33'20"E 202.60'
N61°31'20"E 117.39'
N55°20'20"E 63.46'
BITUMINOUS PAVEMENT RESTORATION (1400 SF)
LOCATION OF PREVIOUSLY INSTALLED FREEZER INCLUDED IN STORMWATER CALCULATIONS.
Conc. Sidewalk
EXIST. BIKE RACKS
Storm Manhole (Dia.=2') Rim Elev.=308.58' Inv. In (16")=299.08' Inv. Out (16")=299.08'
Storm Manhole Rim Elev.=309.15' Inv. In (16")=299.05' Inv. In (16")=299.58' Inv. Out (16")=299.18'
Inlet (Type "M") T.C.=309.72' Inv. In (16")=300.82' Inv. Out (16")=300.82'
Inlet (Type "M") T.C.=309.53' Inv. In (16")=300.63' Inv. Out (16")=300.63'
Inlet (Type "M") T.C.=309.72' Inv. In (16")=300.82' Inv. Out (16")=300.82'
Inlet (Type "C") T.C.=309.72' Inv. Elev.= inaccessible
Inlet (Type "M") T.C.=309.53' Inv. In (16")=301.83' Inv. In (12")=301.87' Inv. In (16")=298.54' Inv. Out (12")=298.54'
Inlet (Type "M") T.C.=309.72' Inv. In (16")=300.82' Inv. Out (16")=300.82

DRAWING: C:\Users\jmoedter\DC\ACCDocs\ELA Group\AZ202-015 McCaskey Stadium Renovations\Project Files\CAD Data\Land Development\LD-PRELIMEASEMENT.dwg - PLOTTED: Apr 02, 2025 2:17 pm



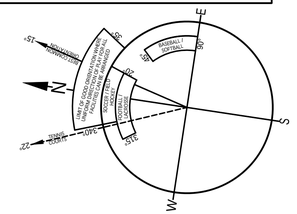
EASEMENT PLAN LEGEND

- PROPERTY LINE
- EASEMENT LINE
- CENTERLINE
- RIGHT OF WAY LINE
- BUILDING SETBACK LINE
- FENCE LINE
- CONCRETE CURB
- PROPOSED STORMWATER BASIN
- TREE LINE

STORMWATER EASEMENT

ACCESS EASEMENT

LIMIT OF DISTURBANCE/ PROJECT SITE BOUNDARY = 6.82 AC., 288,367 S.F.



SCALE IN FEET: 1" = 50'

0 25 50 100 150

REVISIONS PER:		DATE:	BY:
1.	COL/LCCD COMMENTS	3/28/25	EWB
2.	-	-	-
3.	-	-	-
4.	-	-	-
5.	-	-	-

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COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
ELIZABETH WERNER BALDWIN
ENGINEER
PE080726

PENNSYLVANIA
DAVID D. RADCLIFF
REGISTRATION NUMBER RA-14
REGISTERED LANDSCAPE ARCHITECT

STORMWATER MANAGEMENT PLAN

SUBJECT:

EASEMENT PLAN

MCCASKEY HIGH SCHOOL

MCCASKEY HIGH SCHOOL STADIUM RENOVATIONS

CITY OF LANCASTER - LANCASTER COUNTY - PENNSYLVANIA

CLIENT:

MM ARCHITECTS

214 NORTH DUKE STREET

LANCASTER, PA 17602

(717) 393-3211

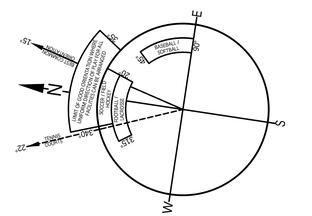
MANAGER:	HDC	DATE:	February 6, 2025
DESIGNER:	EWB	PROJECT NO.	AZ202-015
DRAWN BY:	JMT	SCALE:	########

DRAWING NO.

10 OF 53

SITE LAYOUT LEGEND

- PROPERTY LINE
- EASEMENT LINE
- CENTERLINE
- RIGHT OF WAY LINE
- BUILDING SETBACK LINE
- FENCE LINE
- CONCRETE CURB
- CLEAR SIGHT TRIANGLE
- PROPOSED STORMWATER BASIN
- TREE LINE
- CONCRETE PAVING
- BITUMINOUS PAVING
- PROPOSED SANITARY SEWER MANHOLE
- CONCRETE MONUMENT
- PROPOSED STORM WATER INLET
- IRON PIN
- PROPOSED YARD DRAIN
- SIGNAGE
- PROPOSED STORM WATER MANHOLE
- PROPOSED FIRE HYDRANT
- HEADWALL/ENDWALL
- HANDICAP ACCESSIBLE PARKING
- NEW SITE LIGHT-SINGLE FIXTURE
- NEW SITE LIGHT-DOUBLE FIXTURE



SCALE IN FEET: 1" = 30'

0 15 30 60 90

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3. -	-	-
4. -	-	-
5. -	-	-

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COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — ELIZABETH WERNER BALDWIN — ENGINEER — PE080724

PENNSYLVANIA — REGISTERED LANDSCAPE ARCHITECT

STORMWATER MANAGEMENT PLAN

SUBJECT:

LAYOUT PLAN

MCCASKEY HIGH SCHOOL

MCCASKEY HIGH SCHOOL STADIUM RENOVATIONS

CITY OF LANCASTER - LANCASTER COUNTY - PENNSYLVANIA

CLIENT:

MM ARCHITECTS

214 NORTH DUKE STREET

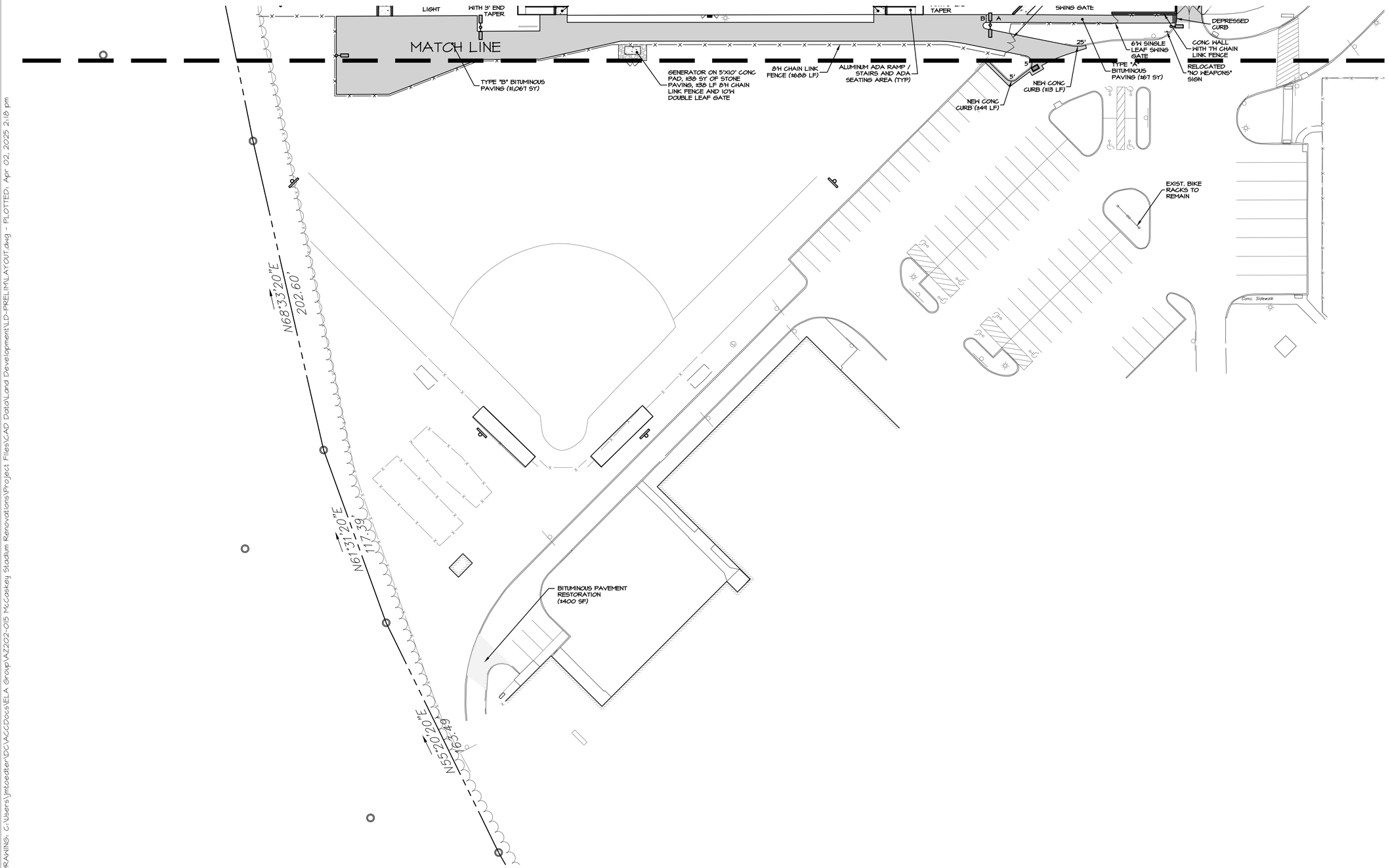
LANCASTER, PA 17602

(717) 393-3211

MANAGER:	HDC	DATE:	March 28, 2025
DESIGNER:	EWB	PROJECT NO.	AZ202-015
DRAWN BY:	JMT	SCALE:	1" = 30'

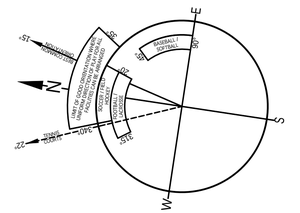
DRAWING NO.

11 OF 53



SITE LAYOUT LEGEND

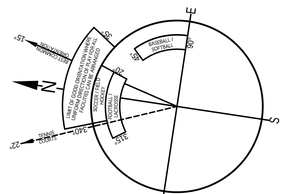
- PROPERTY LINE
- EASEMENT LINE
- CENTERLINE
- RIGHT OF WAY LINE
- BUILDING SETBACK LINE
- FENCE LINE
- CONCRETE CURB
- CLEAR SIGHT TRIANGLE
- PROPOSED STORMWATER BASIN
- TREE LINE
- CONCRETE PAVING
- BITUMINOUS PAVING
- PROPOSED SANITARY SEWER MANHOLE
- CONCRETE MONUMENT
- PROPOSED STORM WATER INLET
- IRON PIN
- PROPOSED YARD DRAIN
- SIGNAGE
- PROPOSED STORM WATER MANHOLE
- PROPOSED FIRE HYDRANT
- HEADWALL/ENDWALL
- HANDICAP ACCESSIBLE PARKING
- NEW SITE LIGHT-SINGLE FIXTURE
- NEW SITE LIGHT-DOUBLE FIXTURE

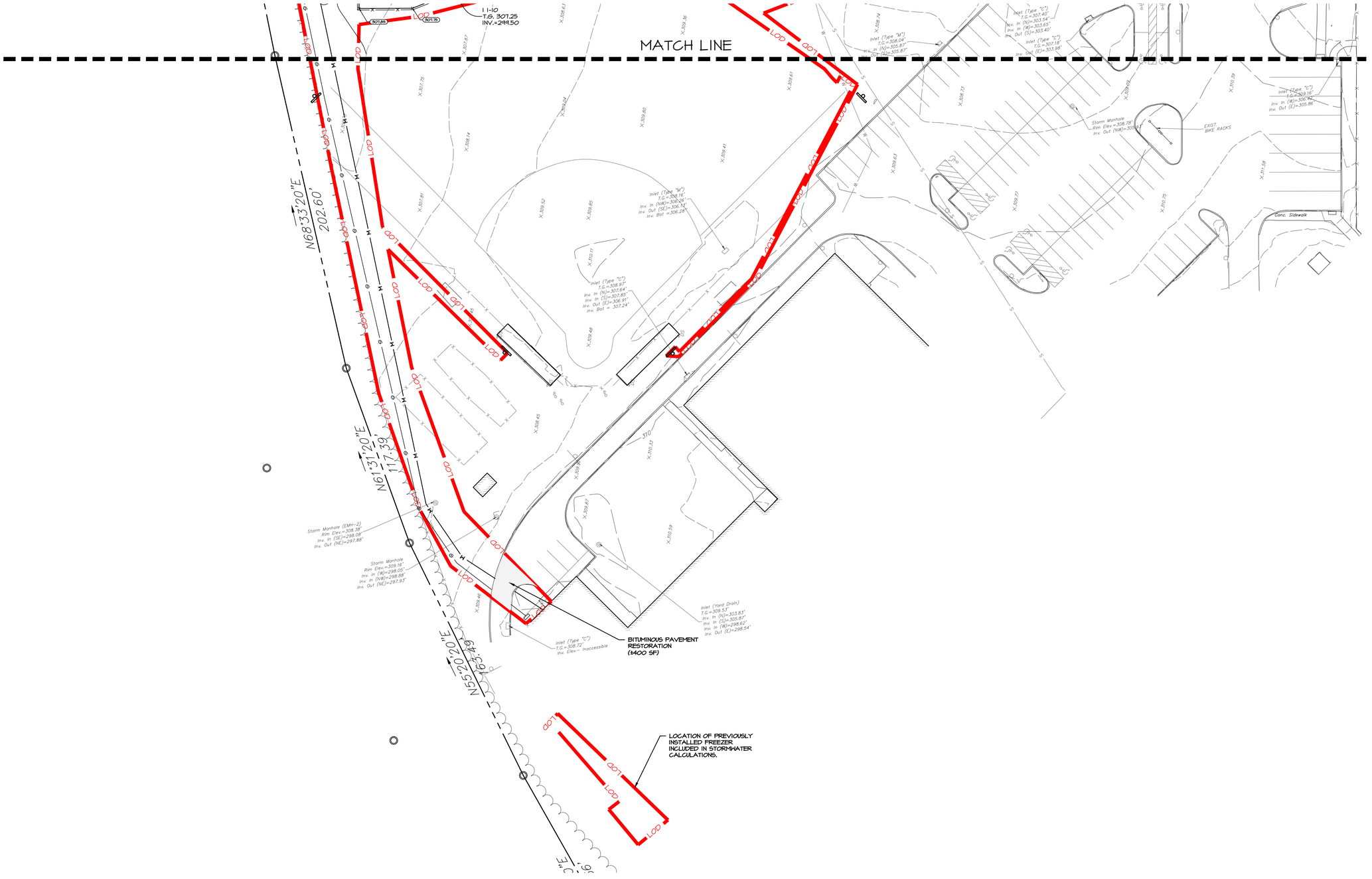

N
E
S
W
BASEBALL / SOFTBALL
SOCCER / FIELD HOCKEY
SOCCER / LACROSSE
SOCCER / LACROSSE
SOCCER / LACROSSE

DRAWING: G:\Users\jmteadter\DCVACCDocs\ELA Group\AZ202-015 McCaskey Stadium Renovations\Project Files\CAD Data\Land Development\LD-PRELIM\GRADING.dwg - PLOTTED: Apr 02, 2025 2:18 pm

GRADING LEGEND

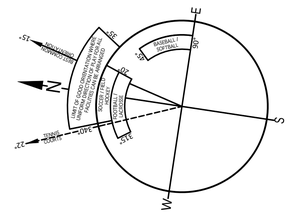
- PROPOSED CONTOUR
- EXISTING CONTOUR
- EXISTING STORM DRAINAGE PIPING (Headwall, Manhole, Inlet, Endwall, R/P Rip Rap)
- PROPOSED STORM DRAINAGE PIPING (HEADWALL, MANHOLE, INLET, ENDWALL, R/P RAP)
- PROPOSED PERIMETER DRAIN
- PROPOSED FULLY PERFORATED DRAINAGE PIPING
- EXISTING OVERHEAD ELECTRIC (Utility Pole OH, Electric Meter EM)
- EXISTING UNDERGROUND ELECTRIC (Utility Pole UE, Electric Transformer ET)
- EXISTING UNDERGROUND TELEPHONE (Utility Pole UT, Manhole T, Telephone Box GR)
- EXISTING GAS LINE (Gas Valve G, Gas Meter GM)
- EXISTING SANITARY SEWER LINE (Clean Out C.O., S, Manhole S)
- EXISTING SANITARY FORCE MAIN (FM, Manhole S, WV Water Valve, WM Water Meter W, Fire Hydrant FH)
- EXISTING WATER LINE
- EXISTING SPOT GRADE (× 354.05)
- PROPOSED SPOT GRADE (+ 352.50)
- SLOPE GRADIENT AND DIRECTION (5%)
- LOD — LIMIT OF DISTURBANCE
- SCM-1 INFILTRATION & DETENTION
- SCM-1 DETENTION

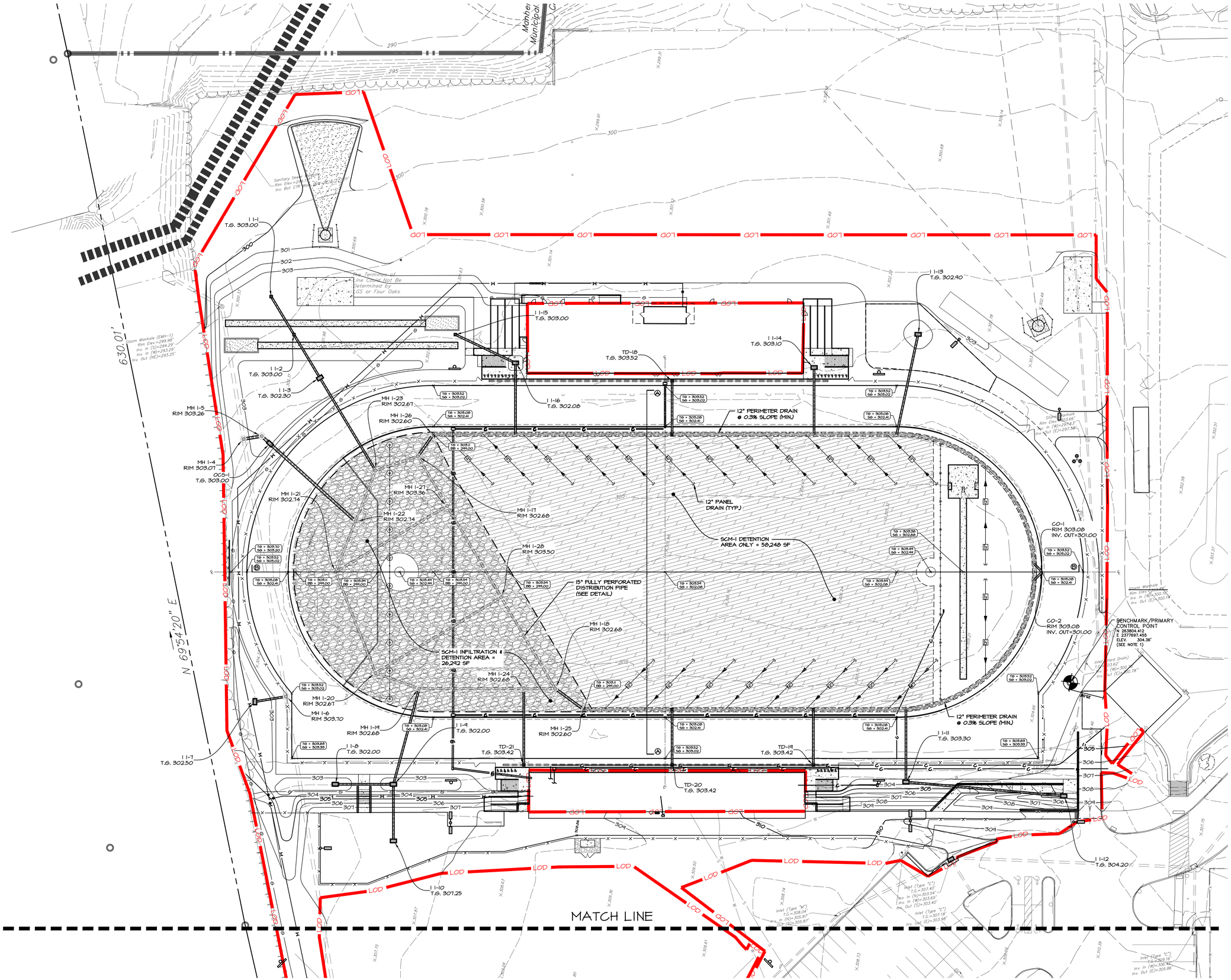

N
S
E
W
BASEBALL
SOFTBALL
SOCCER
FIELD
SOCCER
FIELD
SOCCER
FIELD



GRADING LEGEND

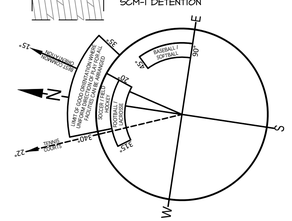
- PROPOSED CONTOUR
- EXISTING CONTOUR
- EXISTING STORM DRAINAGE PIPING
- PROPOSED STORM DRAINAGE PIPING
- PROPOSED PERIMETER DRAIN
- PROPOSED FULLY PERFORATED DRAINAGE PIPING
- EXISTING OVERHEAD ELECTRIC
- EXISTING UNDERGROUND ELECTRIC
- EXISTING UNDERGROUND TELEPHONE
- EXISTING GAS LINE
- EXISTING SANITARY SEWER LINE
- EXISTING SANITARY FORCE MAIN
- EXISTING WATER LINE
- EXISTING SPOT GRADE
- PROPOSED SPOT GRADE
- SLOPE GRADIENT AND DIRECTION
- LIMIT OF DISTURBANCE
- SCM-1 INFILTRATION & DETENTION
- SCM-1 DETENTION

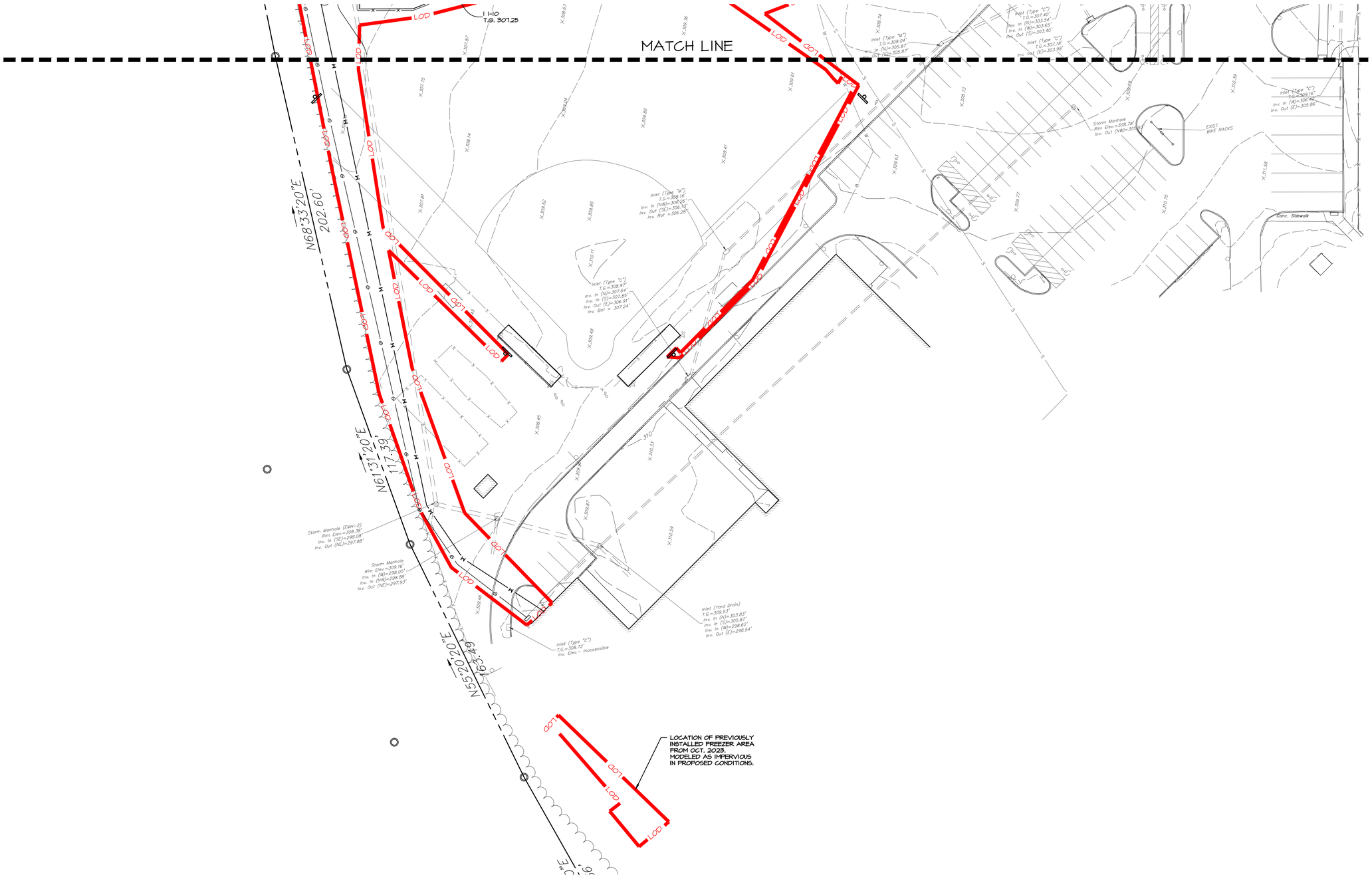

N
E
S
W
BASEBALL / SOFTBALL
SOCCER / FIELD HOCKEY
SOCCER / LACROSSE
SOCCER / FOO



GRADING LEGEND

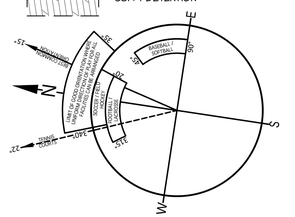
- PROPOSED CONTOUR
- EXISTING CONTOUR
- EXISTING STORM DRAINAGE PIPING (Headwall, Manhole, Inlet, Endwall, R/P Rip Rap)
- PROPOSED STORM DRAINAGE PIPING (HEADWALL, MANHOLE, INLET, ENDWALL, R/P RIAP)
- PROPOSED PERIMETER DRAIN
- PROPOSED FULLY PERFORATED DRAINAGE PIPING
- PROPOSED PANEL DRAIN
- EXISTING OVERHEAD ELECTRIC
- EXISTING UNDERGROUND ELECTRIC
- EXISTING UNDERGROUND TELEPHONE
- EXISTING GAS LINE
- EXISTING SANITARY SEWER LINE
- EXISTING SANITARY FORCE MAIN
- EXISTING WATER LINE
- 354.05 EXISTING SPOT GRADE
- + 352.50 PROPOSED SPOT GRADE
- 5% SLOPE GRADIENT AND DIRECTION
- LOD LIMIT OF DISTURBANCE
- SCM-1 INFILTRATION & DETENTION
- SCM-1 DETENTION

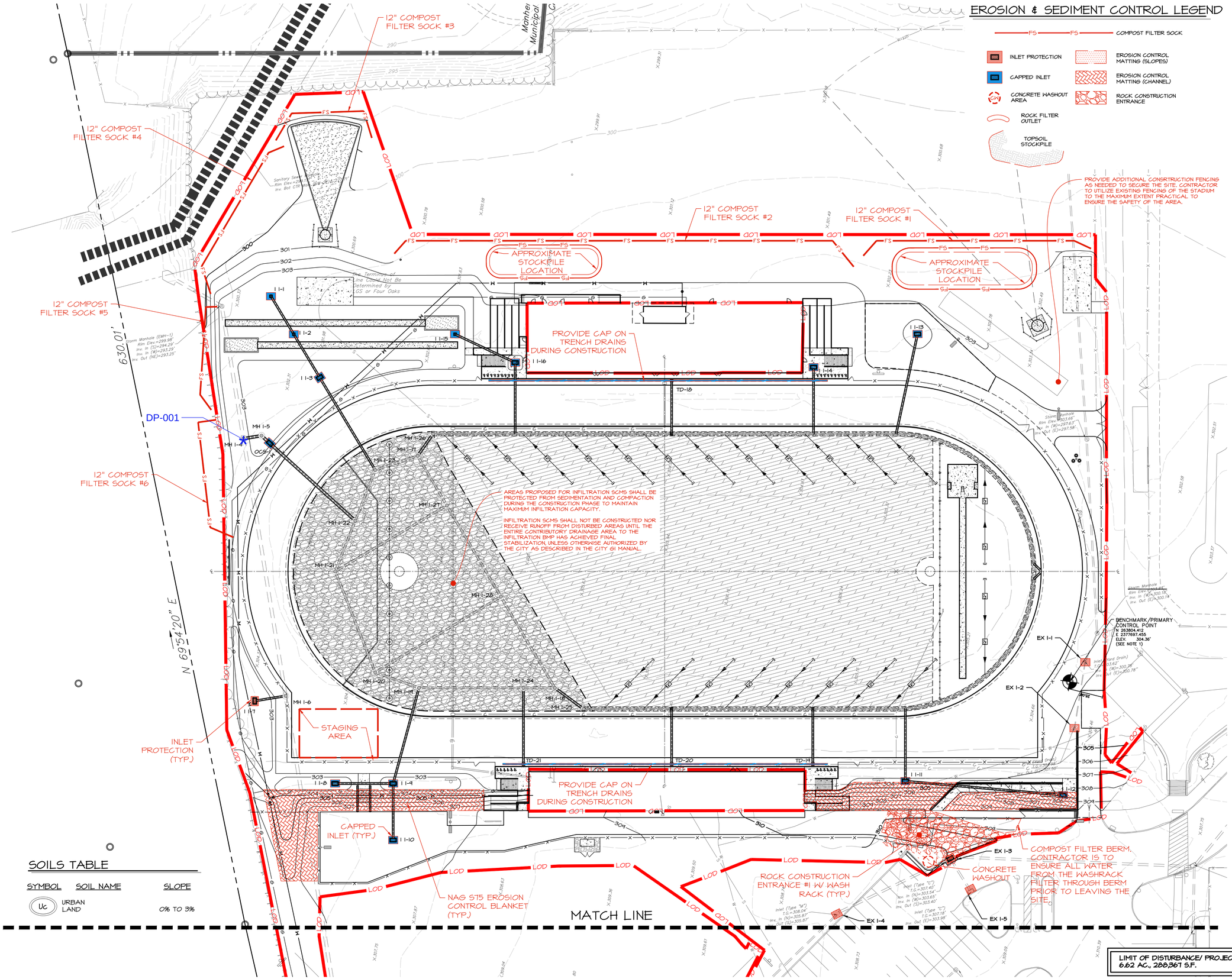

BASEBALL / SOFTBALL
SOCCER
SOCCER
SOCCER



GRADING LEGEND

- PROPOSED CONTOUR
- EXISTING CONTOUR
- EXISTING STORM DRAINAGE PIPING
- PROPOSED STORM DRAINAGE PIPING
- PROPOSED PERIMETER DRAIN
- PROPOSED FULLY PERFORATED DRAINAGE PIPING
- PROPOSED PANEL DRAIN
- EXISTING OVERHEAD ELECTRIC
- EXISTING UNDERGROUND ELECTRIC
- EXISTING UNDERGROUND TELEPHONE
- EXISTING GAS LINE
- EXISTING SANITARY SEWER LINE
- EXISTING SANITARY FORCE MAIN
- EXISTING WATER LINE
- EXISTING SPOT GRADE
- PROPOSED SPOT GRADE
- SLOPE GRADIENT AND DIRECTION
- LIMIT OF DISTURBANCE
- SCM-1 INFILTRATION & DETENTION
- SCM-1 DETENTION


BASEBALL / SOFTBALL
SOCCER / LACROSSE
SOCCER / LACROSSE
SOCCER / LACROSSE



SOILS TABLE

SYMBOL	SOIL NAME	SLOPE
Uc	URBAN LAND	0% TO 3%

LIMIT OF DISTURBANCE/ PROJECT SITE BOUNDARY = 6.62 AC., 288367 S.F.

EROSION & SEDIMENT CONTROL LEGEND

- COMPOST FILTER SOCK
- INLET PROTECTION
- CAPPED INLET
- CONCRETE WASHOUT AREA
- ROCK FILTER OUTLET
- TOPSOIL STOCKPILE
- EROSION CONTROL MATTING (SLOPES)
- EROSION CONTROL MATTING (CHANNEL)
- ROCK CONSTRUCTION ENTRANCE

GRADING LEGEND

- PROPOSED CONTOUR
- EXISTING CONTOUR
- EXISTING STORM DRAINAGE PIPING
- PROPOSED STORM DRAINAGE PIPING
- PROPOSED PERIMETER DRAIN
- PROPOSED FULLY PERFORATED DRAINAGE PIPING
- PROPOSED PANEL DRAIN
- EXISTING OVERHEAD ELECTRIC
- EXISTING UNDERGROUND ELECTRIC
- EXISTING UNDERGROUND TELEPHONE
- EXISTING GAS LINE
- EXISTING SANITARY SEWER LINE
- EXISTING SANITARY FORCE MAIN
- EXISTING WATER LINE
- EXISTING SPOT GRADE
- PROPOSED SPOT GRADE
- SLOPE GRADIENT AND DIRECTION
- LIMIT OF DISTURBANCE
- SCM-1 INFILTRATION & DETENTION
- SCM-1 DETENTION

SCALE IN FEET: 1" = 30'

0 15 30 60 90

REVISIONS PER:	DATE:	BY:
1. COL/LCCD COMMENTS	3/28/25	EWB
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3. -	-	-
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5. -	-	-

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COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — ELIZABETH WERNER BALDWIN — ENGINEER — PE080726

PENNSYLVANIA — REGISTERED LANDSCAPE ARCHITECT

STORMWATER MANAGEMENT PLAN

SUBJECT:
ESC PLAN
MCCASKEY HIGH SCHOOL
MCCASKEY HIGH SCHOOL STADIUM RENOVATIONS
CITY OF LANCASTER - LANCASTER COUNTY - PENNSYLVANIA

CLIENT:
MM ARCHITECTS
214 NORTH DUKE STREET
LANCASTER, PA 17602
(717) 393-3211

MANAGER:	HDC	DATE:	February 6, 2025
DESIGNER:	EWB	PROJECT NO.	AZ202-015
DRAWN BY:	JMT	SCALE:	1" = 30'

DRAWING NO.
17 OF 53

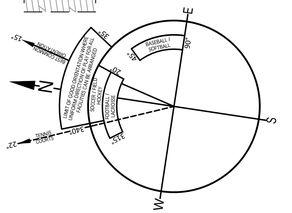
DRAWING: G:\Users\mtoedter\DCVACDocs\ELA Group\AZ202-015 McCaskey Stadium Renovations\Project Files\CAD Data\Land Development\LD-PRELIMESC.dwg - PLOTTED: Apr 02, 2025 2:14 pm

EROSION & SEDIMENT CONTROL LEGEND

- FS — FS — COMPOST FILTER SOCK
- INLET PROTECTION
- CAPPED INLET
- CONCRETE WASHOUT AREA
- ROCK FILTER OUTLET
- TOPSOIL STOCKPILE
- EROSION CONTROL MATTING (SLOPES)
- EROSION CONTROL MATTING (CHANNEL)
- ROCK CONSTRUCTION ENTRANCE

GRADING LEGEND

- 355 — PROPOSED CONTOUR
- 355 — EXISTING CONTOUR
- Headwall, Manhole, Inlet, Endwall, R/P Rip Rap — EXISTING STORM DRAINAGE PIPING
- HEADWALL, MANHOLE, INLET, ENDWALL, R/P RIP RAP — PROPOSED STORM DRAINAGE PIPING
- PROPOSED PERIMETER DRAIN
- PROPOSED FULLY PERFORATED DRAINAGE PIPING
- PROPOSED PANEL DRAIN
- Utility Pole, OH, Electric Meter, EM — EXISTING OVERHEAD ELECTRIC
- Utility Pole, UE, Electric Transformer, ET — EXISTING UNDERGROUND ELECTRIC
- Utility Pole, UT, Manhole, T, Telephone Box, TP — EXISTING UNDERGROUND TELEPHONE
- BV, Gas Valve, G, GM, Gas Meter — EXISTING GAS LINE
- C.O., Clean Out, S, Manhole — EXISTING SANITARY SEWER LINE
- FM, Manhole — EXISTING SANITARY FORCE MAIN
- WM, Water Meter, W, Water Valve, BV, Fire Hydrant — EXISTING WATER LINE
- X 354.05 — EXISTING SPOT GRADE
- + 352.50 — PROPOSED SPOT GRADE
- 5% — SLOPE GRADIENT AND DIRECTION
- LOD — LIMIT OF DISTURBANCE
- SCM-1 INFILTRATION & DETENTION
- SCM-1 DETENTION



SCALE IN FEET: 1" = 30'

0 15 30 60 90

MATCH LINE

NAG S75 EROSION CONTROL BLANKET (TYP.)

ROCK CONSTRUCTION ENTRANCE #1 W/ WASH RACK (TYP.)

FILTER THROUGH BERM PRIOR TO LEAVING THE SITE

EX 1-4

EX 1-5

N68°33'20"E 202.60'

N61°31'20"E 117.39'

N55°20'00"E 163.48'

Storm Manhole (EMH-2) Rim Elev.=308.58' Inv. In (SE)=298.08' Inv. Out (NE)=297.88'

Storm Manhole Rim Elev.=309.16' Inv. In (W)=298.05' Inv. In (NW)=298.88' Inv. Out (NE)=297.93'

Storm Manhole Rim Elev.=308.78' Inv. Out (NW)=305.63'

Inlet (Type "M") T.G.=308.04' Inv. In (N)=305.84' Inv. Out (S)=305.64'

Inlet (Type "M") T.G.=308.16' Inv. In (NW)=306.06' Inv. Out (SE)=306.14' Inv. Bot =306.28'

Inlet (Type "C") T.G.=308.97' Inv. In (N)=307.64' Inv. In (S)=307.85' Inv. Out (E)=306.91' Inv. Bot = 307.24'

Inlet (Type "C") T.G.=308.72' Inv. Elev.= inaccessible

Inlet (Yard Drain) T.G.=309.53' Inv. In (N)=303.83' Inv. In (S)=305.87' Inv. In (W)=298.62' Inv. Out (E)=298.54'

Inlet (Type "C") T.G.=307.40' Inv. In (N)=303.54' Inv. In (W)=303.65' Inv. Out (S)=303.40'

Inlet (Type "C") T.G.=307.18' Inv. Out (E)=303.98'

Inlet (Type "C") T.G.=309.16' Inv. In (W)=306.42' Inv. Out (E)=305.86'

EXIST. BIKE RACKS

Conc. Sidewalk

TRENCH RESTORATION. CONTRACTOR SHALL ONLY INSTALL LENGTH OF TRENCH THAT CAN BE BACKFILLED WITHIN THE DAY. CONTRACTOR TO PROVIDE ANY NECESSARY EROSION AND CONTROL MEASURES IF AREAS MILL NOT BE STABILIZED IMMEDIATELY.

PREVIOUSLY INSTALLED FREEZER AREA FROM OCT 2023. MODELED AS IMPERVIOUS IN PROPOSED CONDITIONS. NO DISTURBANCE OCCURS HERE, AND SHALL BE PROTECTED DURING CONSTRUCTION FROM SEDIMENT LADEN RUNOFF. AREA IS SHOWN FOR CALCULATION PURPOSES ONLY AS PART OF AN AGREEMENT WITH THE CITY OF LANCASTER.

LIMIT OF DISTURBANCE/ PROJECT SITE BOUNDARY = 6.62 AC., 288,367 S.F.

REVISIONS PER:		DATE:	BY:
1.	COL/LCCD COMMENTS	3/28/25	EWB
2.	-	-	-
3.	-	-	-
4.	-	-	-
5.	-	-	-

ELA SPORT
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COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — ELIZABETH WERNER BALDWIN — ENGINEER — PE090729

COMMONWEALTH OF PENNSYLVANIA — ELIZABETH D. CARLSON — REGISTERED LANDSCAPE ARCHITECT

STORMWATER MANAGEMENT PLAN

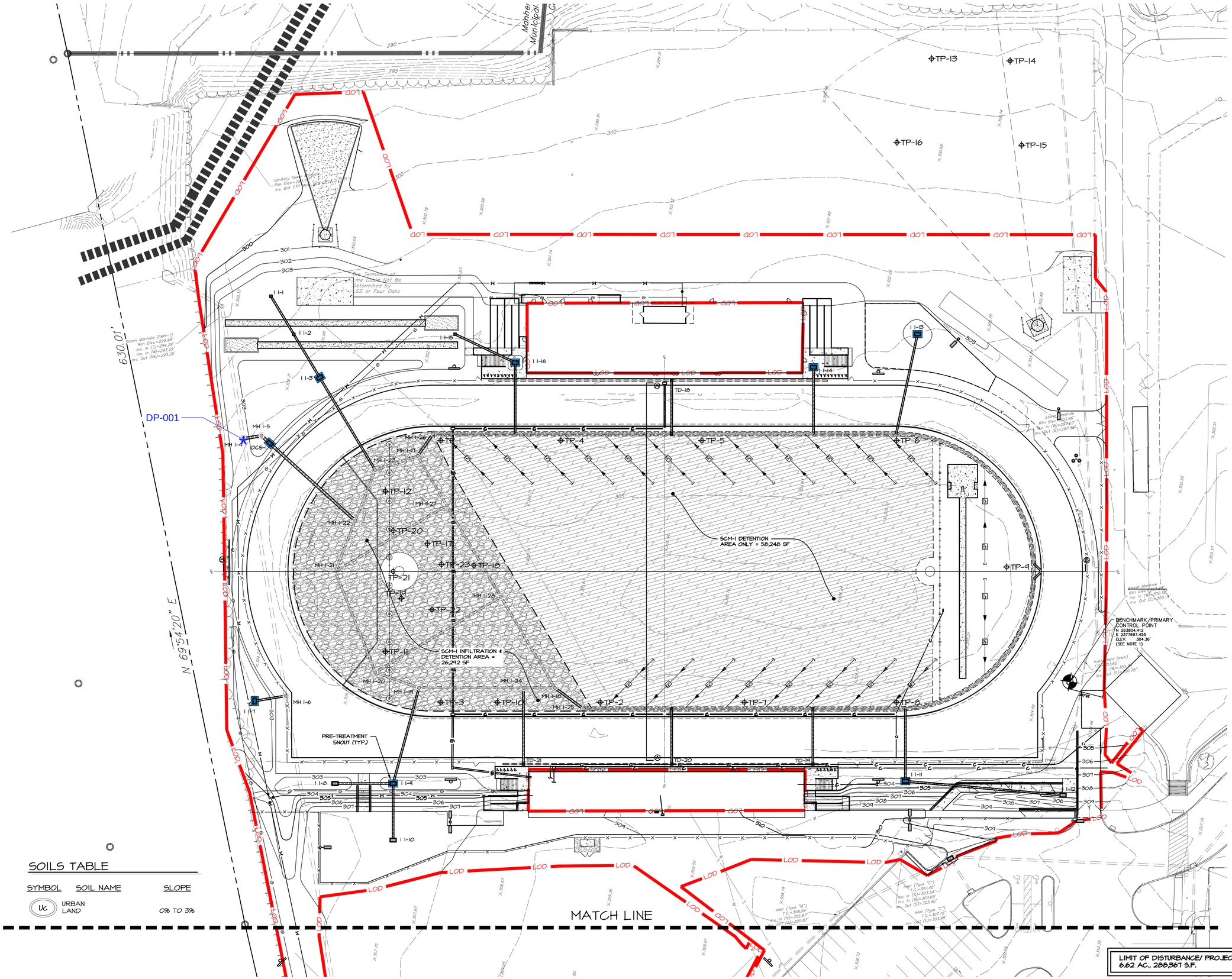
SUBJECT:
ESC PLAN
MCCASKEY HIGH SCHOOL
MCCASKEY HIGH SCHOOL STADIUM RENOVATIONS
CITY OF LANCASTER - LANCASTER COUNTY - PENNSYLVANIA

CLIENT:
MM ARCHITECTS
214 NORTH DUKE STREET
LANCASTER, PA 17602
(717) 393-3211

MANAGER:	HDC	DATE:	February 6, 2025
DESIGNER:	EWB	PROJECT NO.	AZ202-015
DRAWN BY:	JMT	SCALE:	1" = 30'

DRAWING NO.
18 OF 53

DRAWING: G:\Users\jmtzedter\DC\ACCDocs\ELA Group\AZ202-015 McCaskey Stadium Renovations\Project Files\CAD Data\Land Development\LD-PRELIMESC.dwg - PLOTTED: Apr 02, 2025 2:14 pm



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REVISIONS PER:	DATE:	BY:
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COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL ELIZABETH WERNER BALDWIN ENGINEER PE080726

PENNSYLVANIA REGISTERED LANDSCAPE ARCHITECT

STORMWATER MANAGEMENT PLAN

SUBJECT:
PCSM PLAN
MCCASKEY HIGH SCHOOL
MCCASKEY HIGH SCHOOL STADIUM RENOVATIONS
CITY OF LANCASTER - LANCASTER COUNTY - PENNSYLVANIA

CLIENT:
MM ARCHITECTS
214 NORTH DUKE STREET
LANCASTER, PA 17602
(717) 393-3211

MANAGER:	HDC	DATE:	February 6, 2025
DESIGNER:	EWB	PROJECT NO.	AZ202-015
DRAWN BY:	JMT	SCALE:	1" = 30'

DRAWING NO.
19 OF 53

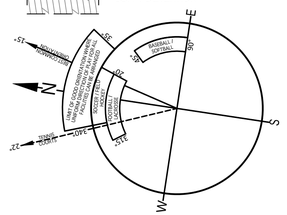
DRAWING: C:\Users\jmloedler\DCVAC\Docs\ELA Group\AZ202-015 McCaskey Stadium Renovations\Project Files\CAD Data\Land Development\LD-PRELIM\PCSM.dwg - PLOTTED: Apr 02, 2025 2:19 pm

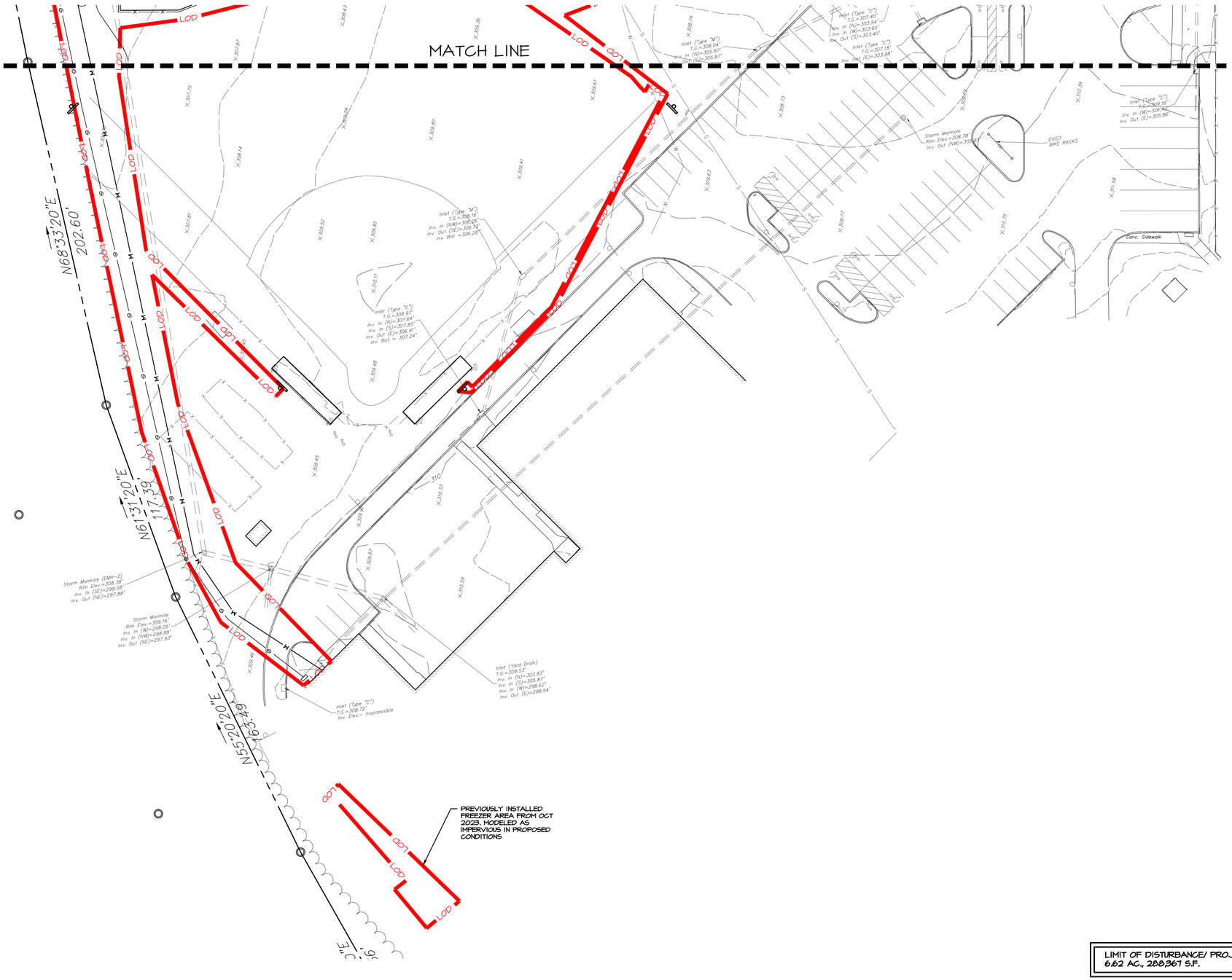
SOILS TABLE

SYMBOL	SOIL NAME	SLOPE
Uc	URBAN LAND	0% TO 3%

GRADING LEGEND

- 355 — PROPOSED CONTOUR
- 355 — EXISTING CONTOUR
- Headwall, Manhole, Inlet, Endwall, R-P Rip Rap — EXISTING STORM DRAINAGE PIPING
- HEADWALL, MANHOLE, INLET, ENDWALL, R-P RIP RAP — PROPOSED STORM DRAINAGE PIPING
- PROPOSED PERIMETER DRAIN
- PROPOSED FULLY PERFORATED DRAINAGE PIPING
- PROPOSED PANEL DRAIN
- Utility Pole, OH, Electric Meter, EM — EXISTING OVERHEAD ELECTRIC
- Utility Pole, UE, Electric Transformer, ET — EXISTING UNDERGROUND ELECTRIC
- Utility Pole, UT, Manhole, Telephone Box, TP — EXISTING UNDERGROUND TELEPHONE
- Gas Valve, GV, G, Gas Meter, GM — EXISTING GAS LINE
- Clean Out, C.O., S, Manhole, S — EXISTING SANITARY SEWER LINE
- FM, Manhole, S — EXISTING SANITARY FORCE MAIN
- Water Meter, WM, W, Water Valve, WV, Fire Hydrant, FH — EXISTING WATER LINE
- × 354.05 — EXISTING SPOT GRADE
- + 352.50 — PROPOSED SPOT GRADE
- 5% — SLOPE GRADIENT AND DIRECTION
- LOD — LIMIT OF DISTURBANCE
- PRE-TREATMENT SNOUT
- TP-1 TEST PIT
- SCM-1 INFILTRATION & DETENTION
- SCM-1 DETENTION





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COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL ENGINEER — ELIZABETH WERNER BALDWIN — PE080726

PENNSYLVANIA — REGISTERED LANDSCAPE ARCHITECT

STORMWATER MANAGEMENT PLAN

SUBJECT:
PCSM PLAN
MCCASKEY HIGH SCHOOL
MCCASKEY HIGH SCHOOL STADIUM RENOVATIONS
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CLIENT:
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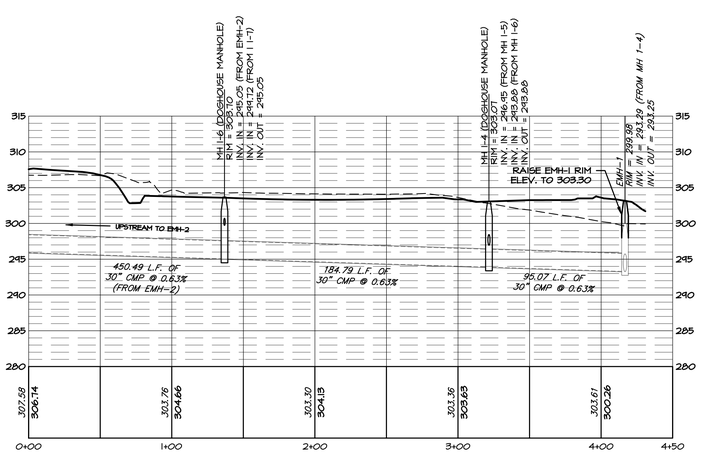
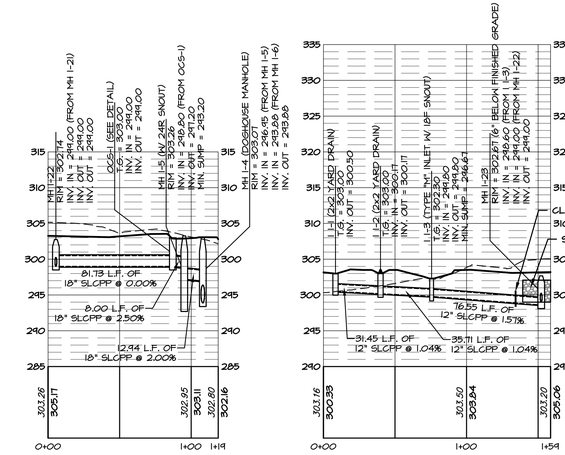
MANAGER:	HDC	DATE:	February 6, 2025
DESIGNER:	EWB	PROJECT NO.	AZ202-015
DRAWN BY:	JMT	SCALE:	1" = 30'

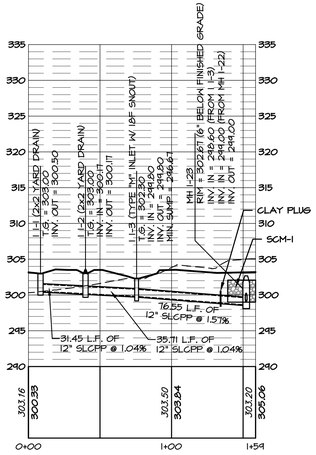
DRAWING NO.
20 OF 53



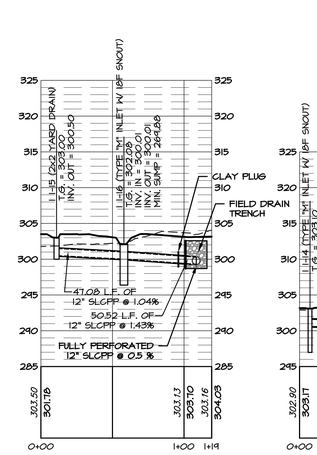
EMH-2 TO EMH-1
HORZ. SCALE: 1"=50'
VERT. SCALE: 1"= 10'



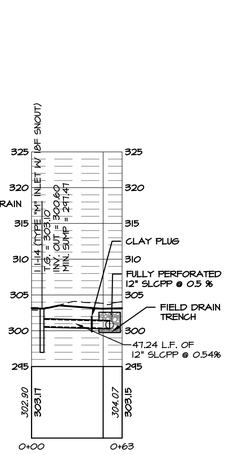
MH 1-22 TO MH 1-4
HORZ. SCALE: 1"=50'
VERT. SCALE: 1"= 10'



I 1-1 TO MH 1-23
HORZ. SCALE: 1"=50'
VERT. SCALE: 1"= 10'



I 1-15 TO PERIMETER DRAIN
HORZ. SCALE: 1"=50'
VERT. SCALE: 1"= 10'



I 1-14 TO PERIMETER DRAIN
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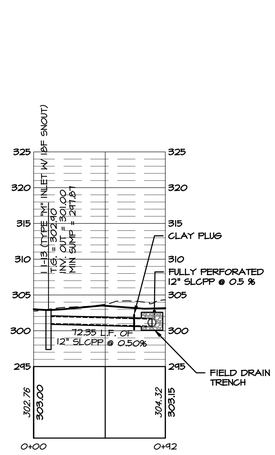
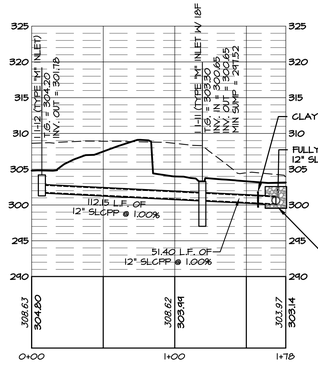
VERT. SCALE: 1"= 10'



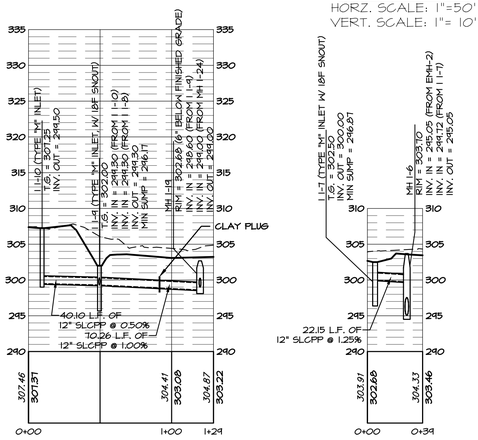
I 1-13 TO PERIMETER DRAIN
HORZ. SCALE: 1"=50'
VERT. SCALE: 1"= 10'

NOTES:

1. CLAY PLUGS SHALL BE PROVIDED ON ALL PIPES ENTERING AND LEAVING THE SCM.

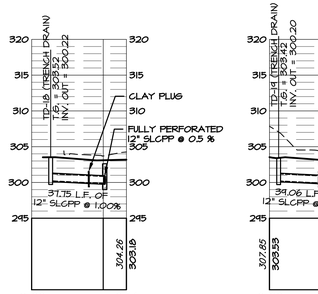


I 1-12 TO PERIMETER DRAIN
HORZ. SCALE: 1"=50'
VERT. SCALE: 1"= 10'

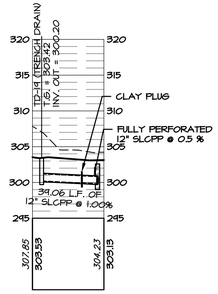


I 1-10 TO PERIMETER DRAIN
HORZ. SCALE: 1"=50'
VERT. SCALE: 1"= 10'

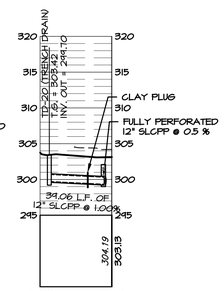
I 1-7 TO MH 1-6
HORZ. SCALE: 1"=50'
VERT. SCALE: 1"= 10'



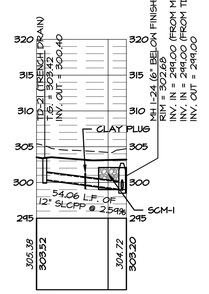
TD 18 TO PERIMETER DRAIN
HORZ. SCALE: 1"=50'
VERT. SCALE: 1"= 10'



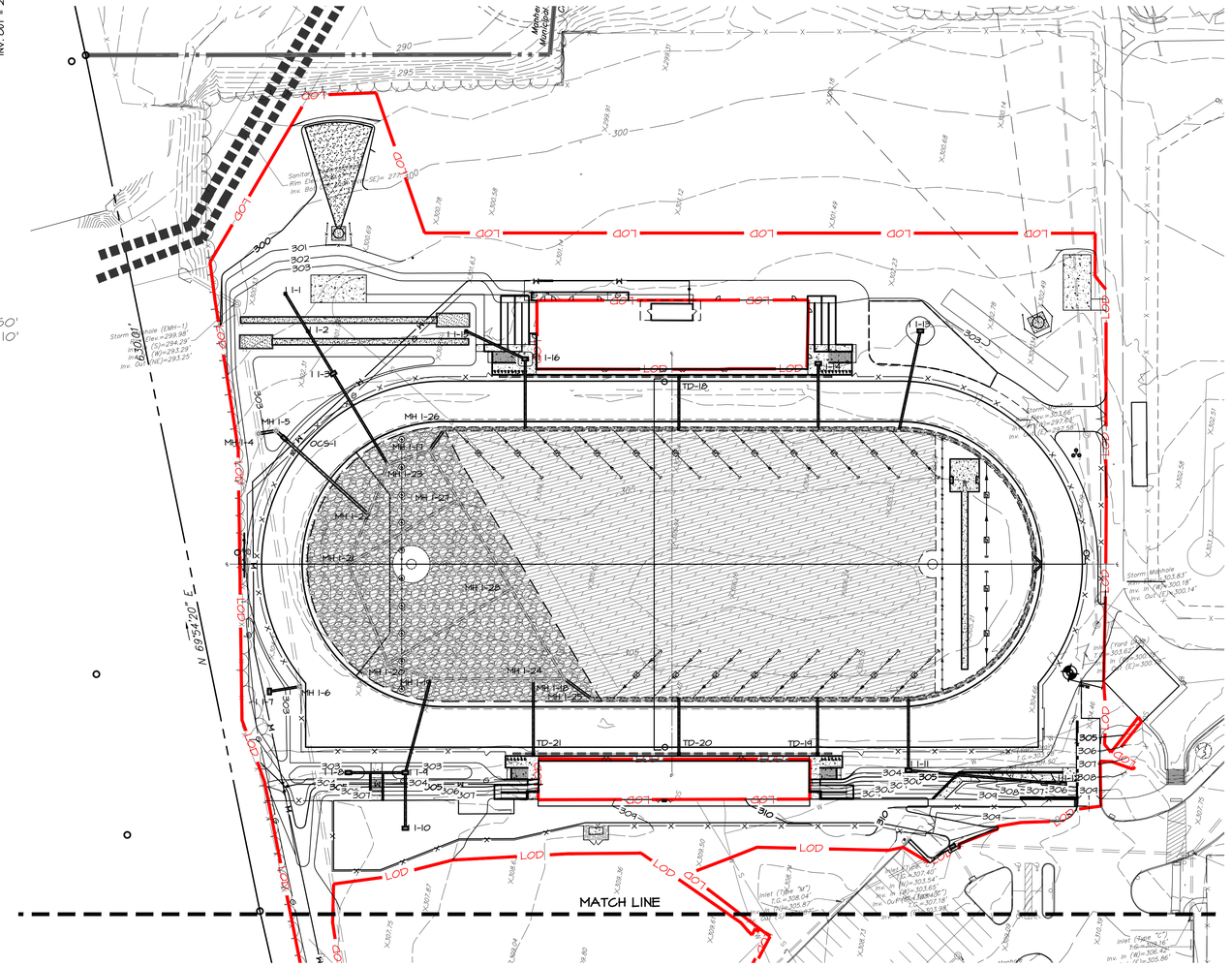
TD 19 TO PERIMETER DRAIN
HORZ. SCALE: 1"=50'
VERT. SCALE: 1"= 10'

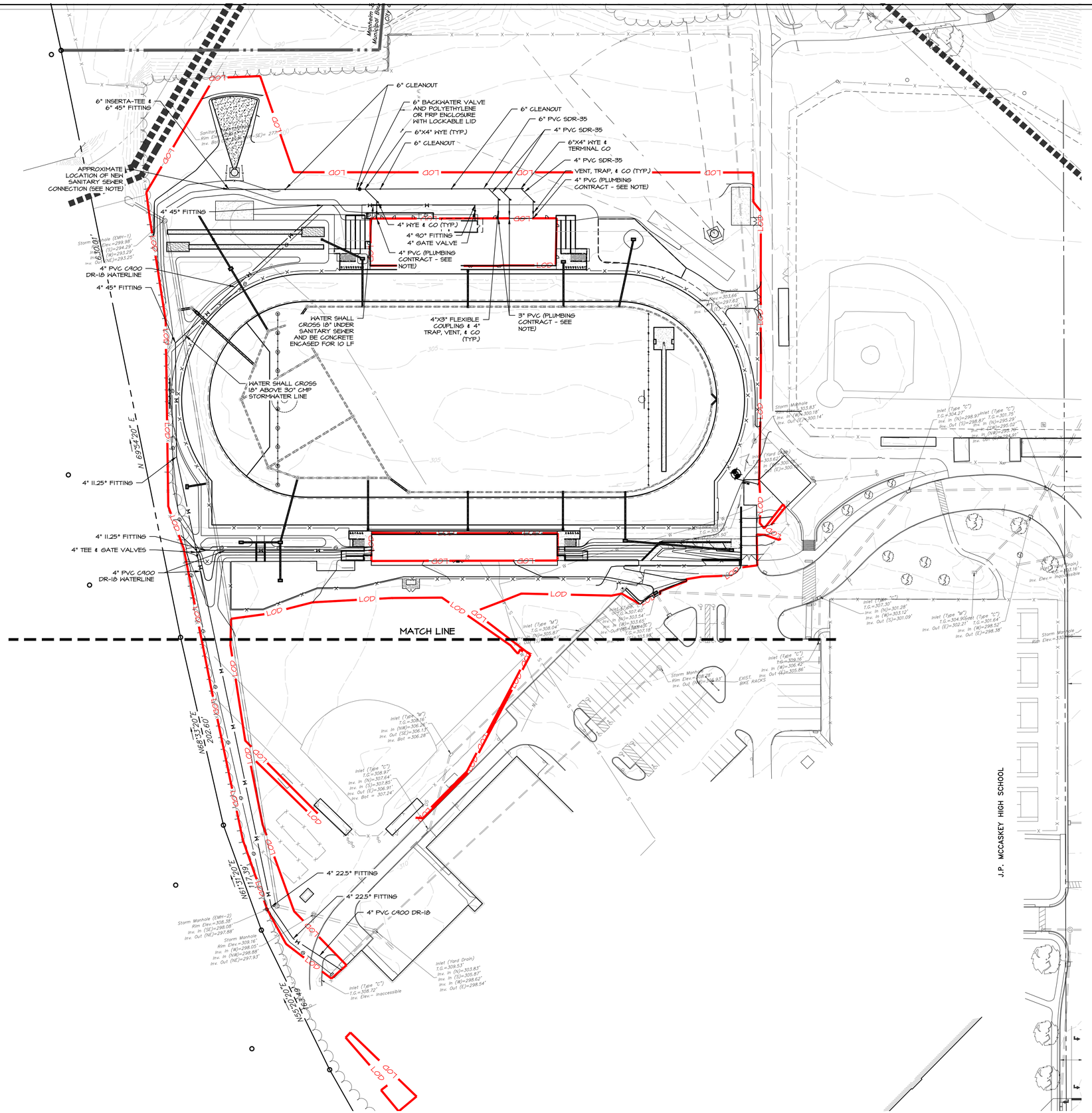


TD 20 TO PERIMETER DRAIN
HORZ. SCALE: 1"=50'
VERT. SCALE: 1"= 10'



TD 21 MH 1-24
HORZ. SCALE: 1"=50'
VERT. SCALE: 1"= 10'


LOD
MATCH LINE
N 63°54'20" E
277.00'
Storm Manhole (EMH-1) Rim Elev.=299.98' Inv. In (S)=294.28' (W)=293.29' (NE)=293.25'
Storm Manhole Rim Elev.=303.66' Inv. In (W)=297.86' Inv. Out (E)=297.76'
Storm Manhole Rim Elev.=303.87' Inv. In (W)=300.18' Inv. Out (E)=300.14'
Inlet (Type 'M') T.G.=308.04' Inv. In (E)=305.87'
Inlet (Type 'C') T.G.=306.76' Inv. In (E)=305.86'
Inlet (Type 'M') T.G.=307.40' Inv. In (N)=303.54' Inv. In (W)=303.45' Inv. In (SW)=303.45' Inv. Out (E)=303.18'
Inlet (Type 'M') T.G.=307.08' Inv. In (W)=303.18' Inv. Out (E)=303.08'
Sanitary Manhole Rim Elev.=308.69' Inv. In (E)=277.00'
Storm Manhole Rim Elev.=308.69' Inv. In (E)=300.00'
Storm Manhole Rim Elev.=308.36' Inv. In (E)=300.00'
Storm Manhole Rim Elev.=308.78' Inv. In (E)=300.00'
Storm Manhole Rim Elev.=308.50' Inv. In (E)=300.00'
Storm Manhole Rim Elev.=308.67' Inv. In (E)=300.00'
Storm Manhole Rim Elev.=308.75' Inv. In (E)=300.00'
Storm Manhole Rim Elev.=308.24' Inv. In (E)=300.00'
Storm Manhole Rim Elev.=308.73' Inv. In (E)=300.00'
Storm Manhole Rim Elev.=309.59' Inv. In (E)=300.00'
Storm Manhole Rim Elev.=309.24

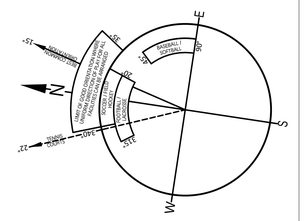


NOTES:

1. NO EQUIPMENT STORAGE, MATERIAL STOCKPILING, OR VIBRATORY ROLLING/COMPACTION WITHIN THE CITY'S SEWER EASEMENT(S).
2. LIMIT OF THE PLUMBING CONTRACT IS WITHIN 5' OF THE BUILDING ENVELOPES. CONTRACTOR RESPONSIBLE FOR SITE WORK SHALL BE RESPONSIBLE FOR WATER AND SANITARY SEWER DEPICTED ON THE PLAN STARTING AT 5' BEYOND THE BUILDING ENVELOPES.
3. CONTRACTOR SHALL FIELD VERIFY DEPTH OF EXISTING SANITARY SEWER MAIN AT PROPOSED POINT OF CONNECTION AND SHALL FIELD ADJUST THE SLOPE OF THE SANITARY SEWER FROM THE MAIN TO THE CLEANOUT ADJACENT TO THE BACKWATER VALVE ACCORDINGLY.

UTILITY LEGEND

- EXISTING STORM DRAINAGE PIPING (Headwall, Manhole, Inlet, Endwall, Rip Rap)
- PROPOSED STORM DRAINAGE PIPING (HEADWALL, MANHOLE, INLET, ENDWALL, RIP RAP)
- EXISTING OVERHEAD ELECTRIC (Utility Pole, OH, Electric Meter)
- PROPOSED OVERHEAD ELECTRIC (UTILITY POLE, OHE, TRANSFORMER)
- EXISTING UNDERGROUND ELECTRIC (Utility Pole, UE, Electric Transformer)
- PROPOSED UNDERGROUND ELECTRIC (UTILITY POLE, UE, TRANSFORMER)
- EXISTING UNDERGROUND TELEPHONE (Utility Pole, UT, Manhole, Telephone Box)
- EXISTING GAS LINE (Gas Valve, G, Gas Meter)
- PROPOSED GAS LINE (GAS VALVE, G, GAS METER)
- EXISTING SANITARY SEWER LINE (Clean Out, CO, S, Manhole)
- PROPOSED SANITARY SEWER LINE (MANHOLE, SAN, CLEANOUT, CO)
- EXISTING SANITARY FORCE MAIN (FM, Manhole)
- PROPOSED SANITARY FORCE MAIN (MANHOLE, FM)
- EXISTING WATER LINE (WV, Water Meter, W, Water Valve, Fire Hydrant)
- PROPOSED WATER LINE (WATER VALVE, W, FIRE HYDRANT)
- LIMIT OF DISTURBANCE (LOD)



SCALE IN FEET: 1" = 50'

0 25 50 100 150

REVISIONS PER:	DATE:	BY:
1. COL/LCCD COMMENTS	3/28/25	EWB
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3. -	-	-
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COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — ELIZABETH WERNER BALDWIN — ENGINEER — PE080729 — PENNSYLVANIA

COMMONWEALTH OF PENNSYLVANIA — HUGH D. CARTER — REGISTRATION NUMBER RA-414 — REGISTERED LANDSCAPE ARCHITECT

STORMWATER MANAGEMENT PLAN

SUBJECT:

UTILITY PLAN

MCCASKEY HIGH SCHOOL

MCCASKEY HIGH SCHOOL STADIUM RENOVATIONS

CITY OF LANCASTER - LANCASTER COUNTY - PENNSYLVANIA

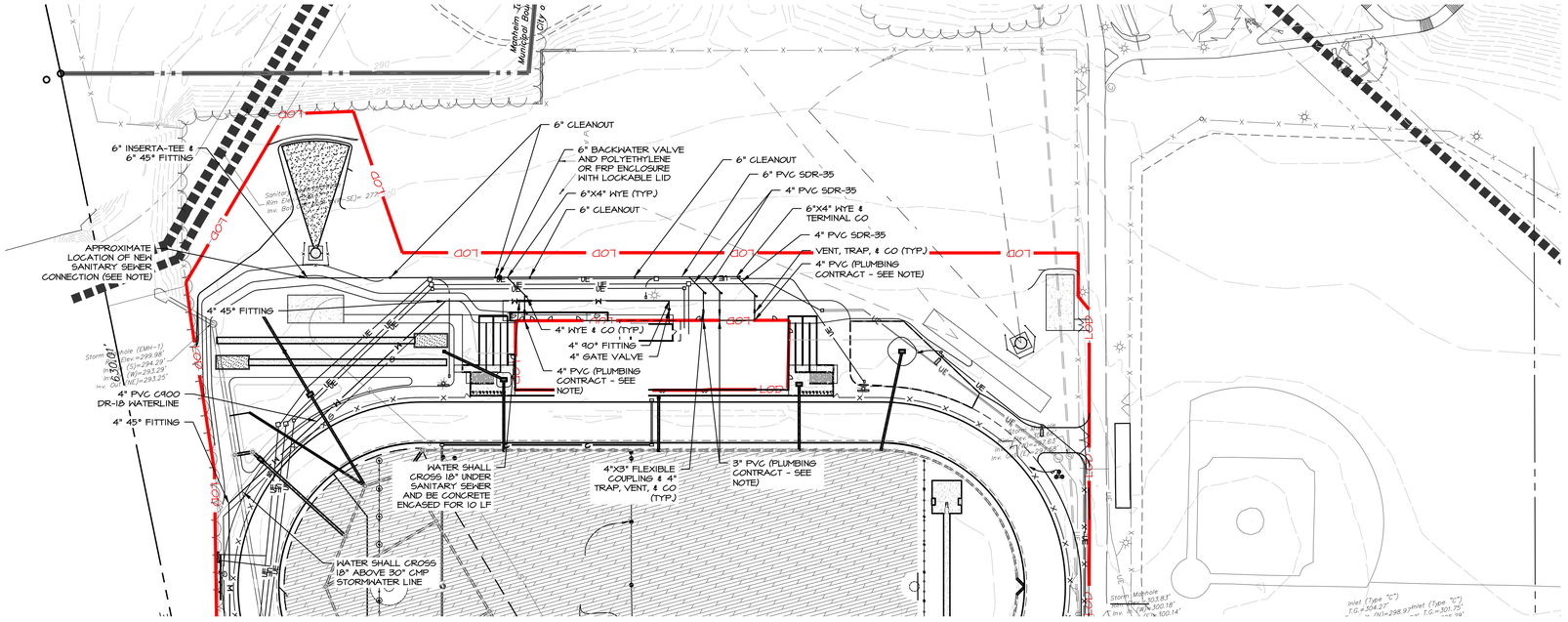
CLIENT:

MM ARCHITECTS
214 NORTH DUKE STREET
LANCASTER, PA 17602
(717) 393-3211

MANAGER:	HDC	DATE:	February 6, 2025
DESIGNER:	EWB	PROJECT NO.	AZ202-015
DRAWN BY:	JMT	SCALE:	1" = 50'

DRAWING NO.

22 OF 53



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3. CONTRACTOR SHALL FIELD VERIFY DEPTH OF EXISTING SANITARY SEWER MAIN AT PROPOSED POINT OF CONNECTION AND SHALL FIELD ADJUST THE SLOPE OF THE SANITARY SEWER FROM THE MAIN TO THE CLEANOUT ADJACENT TO THE BACKWATER VALVE ACCORDINGLY.

UTILITY LEGEND

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- PROPOSED STORM DRAINAGE PIPING (HEADWALL, MANHOLE, INLET, ENDWALL, RIP RAP)
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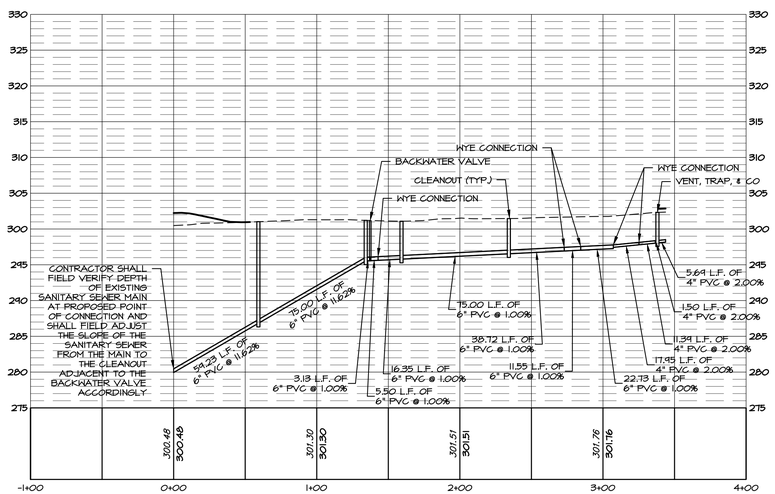
- PROPOSED OVERHEAD ELECTRIC (UTILITY POLE, TRANSFORMER)
- EXISTING UNDERGROUND ELECTRIC (Utility Pole, Electric Transformer)
- PROPOSED UNDERGROUND ELECTRIC (UTILITY POLE, TRANSFORMER)
- EXISTING UNDERGROUND TELEPHONE (Utility Pole, Manhole, Telephone Box)
- EXISTING GAS LINE (Gas Valve, Gas Meter)
- PROPOSED GAS LINE (GAS VALVE, GAS METER)
- EXISTING SANITARY SEWER LINE (Clean Out, Manhole)
- PROPOSED SANITARY SEWER LINE (MANHOLE, CLEANOUT)
- EXISTING SANITARY FORCE MAIN (Manhole)
- PROPOSED SANITARY FORCE MAIN (MANHOLE, Manhole)
- EXISTING WATER LINE (Water Meter, Water Valve, Fire Hydrant)
- PROPOSED WATER LINE (WATER VALVE, FIRE HYDRANT)
- LIMIT OF DISTURBANCE

NORTH

SCALE IN FEET: 1" = 50'

0 25 50 100 150



SANITARY SEWER
HORZ. SCALE: 1"=50'
VERT. SCALE: 1"= 10'

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COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — ELIZABETH WERNER BALDWIN — ENGINEER — PE080726

PENNSYLVANIA — WASHINGTON D.C. — REGISTERED LANDSCAPE ARCHITECT — REGISTRATION NUMBER RA-015

STORMWATER MANAGEMENT PLAN

SUBJECT:

UTILITY PLAN & PROFILE

MCCASKEY HIGH SCHOOL

MCCASKEY HIGH SCHOOL STADIUM RENOVATIONS

CITY OF LANCASTER - LANCASTER COUNTY - PENNSYLVANIA

CLIENT:

MM ARCHITECTS

214 NORTH DUKE STREET

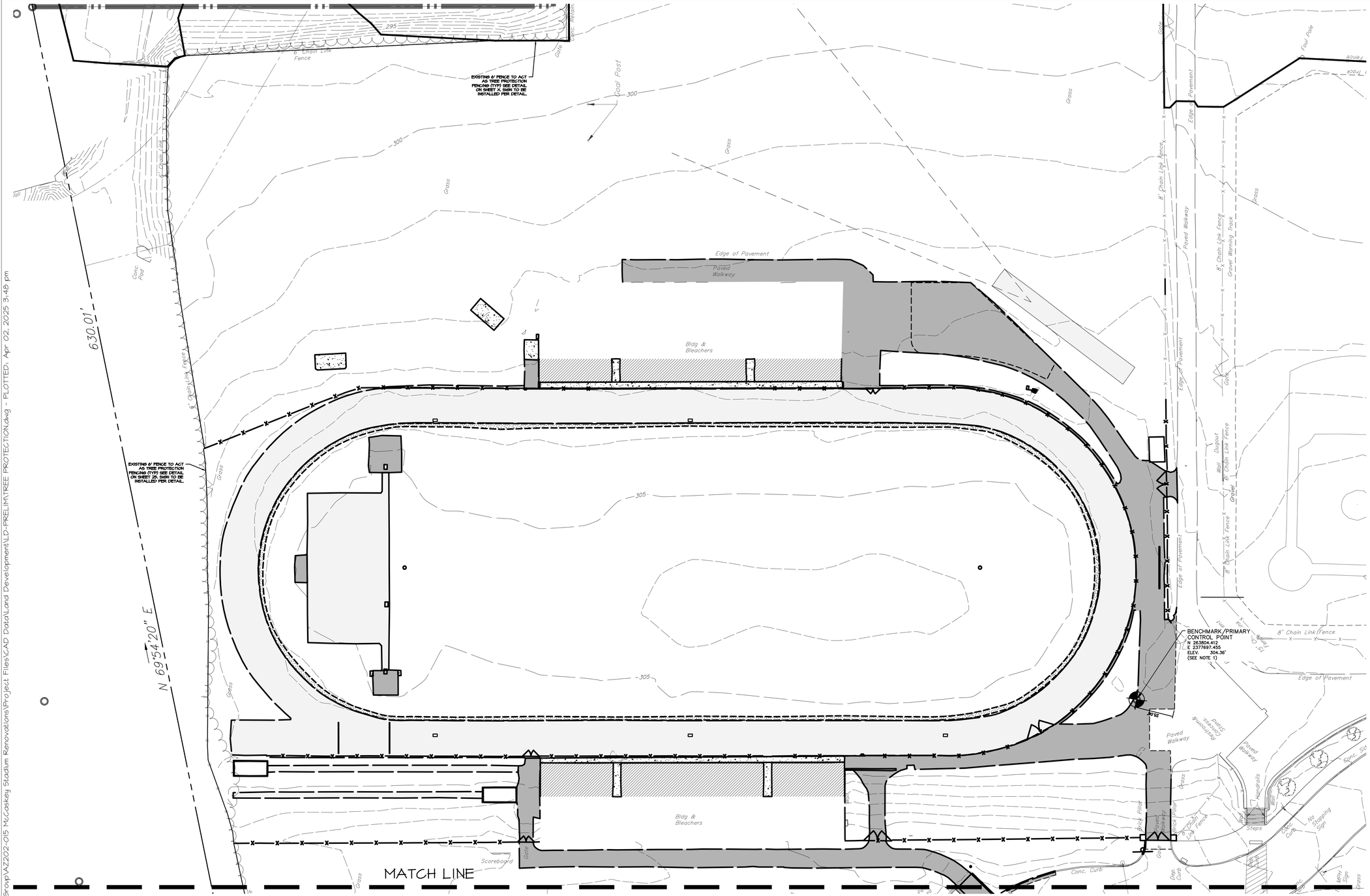
LANCASTER, PA 17602

(717) 393-3211

MANAGER:	HDC	DATE:	February 6, 2025
DESIGNER:	EWB	PROJECT NO.	AZ202-015
DRAWN BY:	JMT	SCALE:	1" = 50'

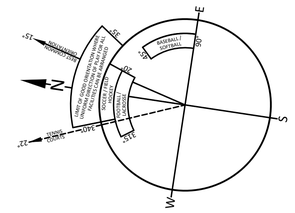
DRAWING NO.

23 OF 53



SITE LAYOUT LEGEND

- PROPERTY LINE
- EASEMENT LINE
- CENTERLINE
- RIGHT OF WAY LINE
- BUILDING SETBACK LINE
- FENCE LINE
- CONCRETE CURB
- CLEAR SIGHT TRIANGLE
- PROPOSED STORMWATER BASIN
- TREE LINE
- CONCRETE PAVING
- BITUMINOUS PAVING
- PROPOSED SANITARY SEWER MANHOLE
- CONCRETE MONUMENT
- PROPOSED STORM WATER INLET
- IRON PIN
- PROPOSED YARD DRAIN
- SIGNAGE
- PROPOSED STORM WATER MANHOLE
- PROPOSED FIRE HYDRANT
- HEADWALL/ENDWALL
- HANDICAP ACCESSIBLE PARKING
- NEW SITE LIGHT-SINGLE FIXTURE
- NEW SITE LIGHT-DOUBLE FIXTURE



SCALE IN FEET: 1" = 30'

0 15 30 60 90

REVISIONS PER:	DATE:	BY:
1. COU/LCCD COMMENTS	3/28/25	EWB
2. -	-	-
3. -	-	-
4. -	-	-
5. -	-	-

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COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — ELIZABETH WERNER BALDWIN — ENGINEER — 062080234

COMMONWEALTH OF PENNSYLVANIA — REGISTERED LANDSCAPE ARCHITECT

TREE PROTECTION NOTES

TREE PROTECTION NOTES:

(SEE TREE PROTECTION SHEET FOR DETAIL)

1. CONTRACTOR SHALL INSTALL ALL TREE PROTECTION FENCING AS INDICATED ON THE DRAWINGS AND DETAILS PRIOR TO BEGINNING ANY CONSTRUCTION ACTIVITIES ON THE PROJECT SITE.
2. EQUIPMENT SHALL NOT BE PERMITTED TO TRAVEL WITHIN A TREE PROTECTION ZONE, NOR ANY CONSTRUCTION MATERIALS/EQUIPMENT STORED WITHIN THE PROTECTION ZONE.
3. CUT AND FILL, GRADE CHANGE OR SOIL COMPACTION WITHIN A PROTECTION ZONE SHALL BE AVOIDED.
4. ALL UNDERGROUND UTILITIES SHALL BE ROUTED AROUND AND AWAY FROM ALL TREE PROTECTION ZONES. IF APPROVED BY THE PUBLIC WORKS DEPARTMENT, THE CITY ARBORIST OR THE URBAN FORESTER, TUNNELING, BORING OR OTHER METHOD OF PROJECT MODIFICATION UNDER OR AROUND THE TREE SHALL BE USED WHEN NEEDED TO PROTECT THE CONDITION AND SURVIVABILITY OF THE TREE.
5. NO TREE ROOTS OVER 2 INCHES IN DIAMETER SHALL BE PRUNED WITHOUT A SIGNED PERMIT FROM THE CITY. IF DURING EXCAVATION, ROOTS OVER 2 INCHES ARE ENCOUNTERED, CONTACT THE CITY ARBORIST / URBAN FORESTER IMMEDIATELY AT 717-823-7172. UNDER THEIR DIRECTION, ROOTS MAY BE CLEANLY CUT WITH A SHARP PRUNING TOOL. PROTECT EXPOSED ROOTS FROM DESICCATION BY THE USE OF GEOTEXTILE OR STRAW, AND BACKFILLING SHALL BE COMPLETED AS SOON AS POSSIBLE. WATER IMMEDIATELY AFTER BACKFILLING.
6. IF THE ANY TREE IMPACTED BY CONSTRUCTION OCCURS WHEN IN FULL LEAF, CONTACT THE URBAN FORESTER FOR DIRECTION ON THE AMOUNT OF IRRIGATION REQUIRED TO MAINTAIN THE CONDITION OF THE TREE.
7. ANY DAMAGE SUSTAINED BY TREES DURING CONSTRUCTION, SUCH AS BROKEN LIMBS, SEVERED ROOTS, OR SCARRED BARK SHALL BE REPORTED IMMEDIATELY TO THE URBAN FORESTER AND TREATED ACCORDING TO THEIR RECOMMENDATION.
8. ALL MEASURES TAKEN TO FURTHER PROTECT OR TREAT SUCH DAMAGED TREE SHALL BE DONE UNDER THE SUPERVISION OF THE URBAN FORESTER.

YOUNG TREE PRUNING TO ESTABLISH TREE STRUCTURE:

1. PRUNE COMPETING BRANCHES ON NEWLY PLANTED TREES TO REDUCE CO-DOMINANT STEMS AND ESTABLISH A DOMINANT LEADER. OTHER PRUNING OF ALL NEWLY PLANTED TREES SHALL INCLUDE: 1) REMOVAL OF MALFORMED BRANCHES, B) REMOVAL OF CROSSING OR RUBBING BRANCHES, C) REMOVAL OF BRANCHES GROWING AT SHARP/UNUSUAL ANGLES, D) REMOVAL OF BADLY BROKEN BRANCHES, E) REMOVAL OF SUCKERS AND WATER SPROUTS. DO NOT REMOVE MORE THAN 25% OF A YOUNG TREE CANOPY IN ANY GIVEN YEAR WITHOUT APPROVAL OF THE CITY ARBORIST OR URBAN FORESTER.
2. TO REDUCE SUNSCALD, FORMATION OF INTERIOR TRUNK AND LIMB DECAY COLUMNS AND TREE RISK, THE ESTABLISHMENT OF PROPER TREE STRUCTURE INCLUDING THE USE OF PRUNING FOR THE ELIMINATION OF CO-DOMINANT STEMS, PROPER SPACING OF LATERAL BRANCHES, PROPER DEVELOPMENT OF ASPECT RATIO (RATIO OF THE DIAMETER OF A LATERAL BRANCH TO ITS STEM) AND LIFTING CANOPY FOR VIEWS AND TRAFFIC SHOULD BE ESTABLISHED OVER THE FIRST 25 YEARS OF A TREE'S LIFE.
3. TREE PRUNING SHALL FOLLOW THE LATEST VERSION OF THE AMERICAN NATIONAL STANDARDS INSTITUTE PRUNING STANDARDS (ANSI A300) AND/OR THE INTERNATIONAL SOCIETY OF ARBORICULTURE TREE PRUNING BEST MANAGEMENT PRACTICES.

TREE PRESERVATION NOTES

1. PRIOR TO THE START OF ANY CLEARING, GRADING OR OTHER EARTH DISTURBANCE, ALL SHADE TREES AND OTHER VEGETATION TO BE PRESERVED SHALL BE PROTECTED BY A CONSPICUOUS FOUR-FOOT-HIGH TREE PROTECTION BARRIER TO PREVENT ENCROACHMENT INTO THE TREE PROTECTION ZONE BY PEOPLE, MATERIAL, AND VEHICLES. THE TREE PROTECTION BARRIER INSTALLATION MUST BE APPROVED BY THE ARBORIST AND MONITORED PERIODICALLY.
2. ALL LAND DEVELOPMENT PLANS OR LANDSCAPE PLANS SHALL SHOW ALL EXISTING TREES, CLEARLY LABELING ALL TREES PROPOSED TO BE PROTECTED AND THOSE SLATED FOR REMOVAL. ALL SHADE TREES ABUTTING SAID PROJECTS SHALL ALSO BE SHOWN ON THE PLANS ALONG WITH THE REQUIRED TREE PROTECTION ZONE.
3. A PROTECTED TREE ON PRIVATE PROPERTY SHALL INCLUDE ANY TREE WITH A DBH OF 12 INCHES OR MORE LOCATED ON ANY LOT WITHIN 20 FEET OF A STREET RIGHT-OF-WAY (INCLUDING AN APPROVED PRIVATE STREET OR OTHER ACCESS EASEMENT) OR ANY TREE WITH A DBH OF 24 INCHES OR MORE LOCATED ELSEWHERE ON THE LOT.

NOTE:

EXISTING 6' FENCE ALONG THE TREE LINE TO ACT AS THE TREE PROTECTION FENCING. SIGN WILL BE INSTALLED PER DETAIL. L.O.D. RUNS ALONG THE EXISTING FENCE.

STORMWATER MANAGEMENT PLAN

SUBJECT:

TREE PROTECTION PLAN

MCCASKEY HIGH SCHOOL

MCCASKEY HIGH SCHOOL STADIUM RENOVATIONS

CITY OF LANCASTER - LANCASTER COUNTY - PENNSYLVANIA

CLIENT:

MM ARCHITECTS

214 NORTH DUKE STREET

LANCASTER, PA 17602

(717) 393-3211

MANAGER:	HDC	DATE:	March 28, 2025
DESIGNER:	EWB	PROJECT NO.	AZ202-015
DRAWN BY:	JMT	SCALE:	########

DRAWING NO.

24 OF 53

DRAWING: C:\Users\jmtoedter\DC\ACCDocs\ELA Group\AZ202-015 McCaskey Stadium Renovations\Project Files\CAD Data\Land Development\LD-PRELIM\TREE PROTECTION.dwg - PLOTTED: Apr 02, 2025 3:48 pm