TMP ARCHITECTURE

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WASS ELEMENTARY SCHOOL PLAYGROUND

TROY SCHOOL DISTRICT - TROY, MICHIGAN

2022 BOND PROGRAM - BID PACKAGE NO 01B

PROJECT NUMBER 22096B

CONSTRUCTION DOCUMENTS

CONSULTANTS:

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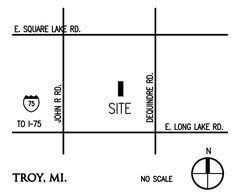
LIST OF DRAWINGS

PROJECT DATA:

LOCATION MAP



TROY, MI. NO SCALE

ADDRESS: WASS ELEMENTARY SCHOOL
2340 WILLARD
TROY, MI 48098

BUILDING:

BUILDING AREA(S) = NOT APPLICABLE

CODE:

GOVERNING CODES:

- 2016 SCHOOL FIRE SAFETY RULES
  (2012 Life Safety Code, plus amendments)
- 2015 MICHIGAN BUILDING CODE
- 2015 MICHIGAN REHABILITATION CODE FOR EXISTING BUILDINGS
- 2018 MICHIGAN PLUMBING CODE
- 2015 MICHIGAN MECHANICAL CODE
- 2015 MICHIGAN UNIFORM ENERGY CODE
  (ANSI/ASHRAE/IES Standard 90.1-2013)
- 2017 MICHIGAN ELECTRICAL CODE (2017 NEC, plus Part 8 Rules)
- 2010 MICHIGAN ELEVATOR RULES
  (ASME A17.1-2010, ASME A18.1-2011)
- MICHIGAN BARRIER FREE CODE
  (Michigan Building Code 2015 and ICC A117.1-2009)
- 2013 MICHIGAN BOILER CODE RULES
  (ASME Boiler and Pressure Vessel Code, 2019 edition)
  (National Board Inspection Code [NBIC], 2019 edition)

CONSTRUCTION CLASSIFICATION: II-B(MBC)/11(000)NFPA

USE GROUP CLASSIFICATION: E-EDUCATION

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10-03-2024	CONSTRUCTION DOCUMENTS
DATE	**ISSUED FOR:**

LICENSEE'S STATEMENT:

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REGISTRATION SEALS

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PROJECT TITLE
Wass Elementary School

PROJECT NO.
22096B

DRAWING NO.
TS.1

ABBREVIATIONS

A

ABV.	ABOVE
A.F.F.	ABOVE FINISH FLOOR
A.R.F.	ABOVE REFERENCE FLOOR
ABR.	ABRASIVE
ABS.	ABSORBING
ACC.	ACCESS
ACC. PNL	ACCESS PANEL
AC.	ACOUSTIC/ACOUSTICAL
ACT	ACOUSTIC TILE
AC. INSUL.	ACOUSTIC INSULATION
ADD.	ADDENDUM
ADDN.	ADDITION
ADDNL.	ADDITIONAL
ADH.	ADHESIVE
ADJ.	ADJUSTIBLE
AGGR.	AGGREGATE
A.C.B.	AIR CIRCUIT BREAKER
A/C	AIR CONDITIONING
A.C.C.	AIR CONDITIONING COMPRESSOR
A.C.U.	AIR CONDITIONING UNIT
A.H.U.	AIR HANDLING UNIT
ALT.	ALTERNATE
ALUM./AL	ALUMINUM
AMT	AMOUNT
AMP	AMPHERE
AMPL.	AMPLIFIER
ANCH.	ANCHOR
A.B.	ANCHOR BOLT
&	AND
ANG./ L or ∠	ANGLE
ANOD.	ANODIZED
APT.	APARTMENT
APPR.	APPROVED
APPROX.	APPROXIMATE
ARCH.	ARCHITECT/ARCHITECTURAL
—	ARCHITECTURAL DRAWING-NO.
A.T.	ASH TRAY
ATM	AUTOMATIC TELLER MACHINE
ASPH.	ASPHALT
ASSY.	ASSEMBLY
@	AT
AUTO.	AUTOMATIC
A.S.R.	AUTOMATIC SPRINKLER RISER
AUX.	AUXILIARY
AVG.	AVERAGE

B

B/B	BACK-TO-BACK
B.F.P.	BACK FLOW PREVENTER
B.D.D.	BACK DRAFT DAMPER
B.F.	BARRIER FREE
B.B.R.	BASE BOARD RADIATION
B.PL.	BASE PLATE
BSMT	BASEMENT
B.	BATH ROOM
BM	BEAM
B/C	BACK OF CURB
BRG	BEARING
B.R.	BEDROOM
B.M.	BENCH MARK
BT	BENT
BETW.	BETWEEN
BEV.	BEVEL
BIT.	BITUMINOUS
BL.	BLACK-IRON
BLK	BLOCK
BLKG	BLOCKING
BD	BOARD
BLR	BOILER
BLR. F.	BOILER FEED
BLR. H.	BOILER HOUSE
BK. SH.	BOOK SHELVES
B.S.	BOTH SIDES
B.W.	BOTH WAYS
BOT.	BOTTOM
BOT. EL.	BOTTOM ELEVATION
BLVD	BOULEVARD
BDRY	BOUNDARY
BRKT	BRACKET
BR.	BRASS
BRKR	BREAKER
BRK	BRICK
BTU	BRITISH THERMAL UNIT
BRZ	BRONZE
BLDG.	BUILDING
B.L.	BUILDING LINE
B.U.R.	BUILT-UP ROOFING
B.N.	BULLNOSE
BLKD	BULKHEAD
BULL.	BULLETIN
B.A.	BURGLAR ALARM
BUZZ.	BUZZER

C

CAB.	CABINET
C.U.H.	CABINET UNIT HEATER
CAP.	CAPACITY
CPT	CARPET
C.R.S.	CARPET REDUCER STRIP
CSMT	CASEMENT
CSWRK	CASEWORK
CSG	CASING
C.I.	CAST IRON
C.I.F.	CAST IRON FRAME
C.I.P.	CAST IRON PIPE/CAST-IN-PLACE
CSTG	CASTING
CAT. NO.	CATALOG NUMBER
C.B.	CATCH BASIN
CLG.	CEILING
C.D.	CEILING DIFFUSER
CLG. HT.	CEILING HEIGHT
CEM.	CEMENT
CEM. PLAS.	CEMENT PLASTER
CTR	CENTER
℄	CENTERLINE
C/C	CENTER-TO-CENTER
CER.	CERAMIC
C.T.	CERAMIC TILE
C.BD.	CHALKBOARD
CHAM.	CHAMFER
CHG.	CHANGE
CHAN. or ⊏	CHANNEL
CHKD. PL.	CHECKERED PLATE
CHWR	CHILLED WATER RETURN
CHWS	CHILLED WATER SUPPLY
CHO	CHORD
CIRCUM.	CIRCUMFERENCE
CIR.	CIRCLE/CIRCULAR
CIRC.	CIRCUIT
C.BR	CIRCUIT BREAKER
—	CIVIL DRAWING-NO.
CL	CLASS
CLRM	CLASSROOM
C.O.	CLEAN OUT
CLR	CLEAR
CLR GL.	CLEAR GLASS
CLR W.GL.	CLEAR WIRE GLASS
CL.	CLOSET
CLO.	CLOSURE
C.CL.	COAT CLOSET
COEF.	COEFFICIENT
C.W.	COLD WATER
COL.	COLUMN
CO.	COMPANY
COMPT.	COMPARTMENT
COMPO.	COMPOSITION
CA	COMPRESSED AIR
COMPR.	COMPRESSOR
CONC.	CONCRETE
C.M.U.	CONCRETE MASONRY UNIT
CWR	CONDENSING WATER RETURN
CWS	CONDENSING WATER SUPPLY
COND.	CONDUIT
CONF.	CONFERENCE
CONN.	CONNECT
CONST.	CONSTRUCTION
C.J.	CONTROL JOINT
CONT.	CONTINUE/CONTINUOUS
CONTR.	CONTRACTOR
C.P.	CONTROL PANEL
CONV.	CONVECTOR
CNVYR	CONVEYOR
COR.	CORNER
C.G.	CORNER GUARD
CORR.	CORRIDOR/CORRUGATED
CPR	COPPER
CNTR	COUNTER
CTSK	COUNTERSINK
CRS.	COURSE
COV.	COVER
COV. PL.	COVER PLATE
C.C.T.	CUBICAL CURTAIN TRACK
CU.FT.	CUBIC FEET/ CUBIC FOOT
CFM	CUBIC FEET PER MINUTE
CY	CUBIC YARD
CULV.	CULVERT
C.D.	CUP DISPENSER
CYL.	CYLINDER
CYC.	CYCLES

D

DMPR	DAMPER
DMPFG	DAMPPROOFING
D.L.	DEAD LOAD
DB	DECIBLE
D.	DEEP
DWG.	DRAWING
DMT. PARTN	DEMOUNTABLE PARTITION
DEPT.	DEPARTMENT
DEPR.	DEPRESSED
DES.	DESIGN
DET.	DETAIL
D.E. CO.	DETROIT EDISON COMPANY
DIAG.	DIAGONAL
DGM	DIAGRAM
DIA.	DIAMETER
DIFF.	DIFFUSER
DIM.	DIMENSION
D.R.	DINING ROOM
DIR.	DIRECTORY.
DISC.	DISCONNECT
DISCONT.	DISCONTINUOUS
DW	DISHWASHER
DISP.	DISPENSER
DIST.	DISTANCE
D.P.	DISTRIBUTION PANEL
DO	DITTO (DO OVER)
DIV.	DIVIDER/DIVISION
DR.	DOOR
D.O.	DOOR OPENING
DR. OP.	DOOR OPERATOR
DBL.	DOUBLE
D.A.	DOUBLE ACTING
D.H.	DOUBLE HUNG
DWL.	DOWEL
DN	DOWN
D.S.	DOWNSPOUT
DRN	DRAIN
D.T.	DRAIN TILE
D.T.C.	DRAIN TILE CONNECTOR
DWR	DRAWER
DWG	DRAWING
D.F.	DRINKING FOUNTAIN
D.B.	DRY BULB
D.S.P.	DRY STAND PIPE
DBWTR	DUMBWAITER
DUP.	DUPLICATE
D.DR.	DUTCH DOOR

E

EA.	EACH
E.F.	EACH FACE
E.W.	EACH WAY
E	EAST
E.I.F.S.	EXTERIOR INSULATION FINISH SYSTEM
ELAST.	ELASTOMERIC
ELAST. FLASH.	ELASTOMERIC FLASHING
ELAST. W.P.	ELASTOMERIC WATERPROOFING
E.S.R.	ELASTOMERIC SHEET ROOFING
ELEC.	ELECTRIC/ELECTRICAL
ELEC. CL.	ELECTRICAL CLOSET
ELEC. CAB.	ELECTRICAL CABINET
E.C.	ELECTRICAL CONTRACTOR
E-	ELECTRICAL DRAWING-NO.
E.P.	ELECTRICAL PANEL
EWC	ELECTRIC WATER COOLER
ELEC. OPER.	ELECTRICALLY OPERATED
EL.	ELEVATION
ELEV.	ELEVATOR
EMERG.	EMERGENCY
ENCL.	ENCLOSURE
ENGR	ENGINEER
E/E	END-TO-END
ENTR.	ENTRANCE/ENTRY
EP.	EPOXY
EPDM	ETHYLENE PROPYLENE DIENE MONOMER
EQ.	EQUAL
EQUIP.	EQUIPMENT
EQUIV.	EQUIVALENT
ESC.	ESCALATOR
EST.	ESTIMATE
EXC.	EXCAVATED
EXH.	EXHAUST
EXH.D.	EXHAUST DUCT
EXH.F.	EXHAUST FAN
EXH.GR.	EXHAUST GRILLE
EXH.R.	EXHAUST REGISTER
EXIST.	EXISTING
EXP	EXPANSION
EXP.B.	EXPANSION BOLT
E.J.	EXPANSION JOINT
EXPL.P.	EXPLOSION PROOF
EXP'D	EXPOSED
EXT'N	EXTENSION
EXT.	EXTERIOR
E.I.F.S.	EXTERIOR INSULATION FINISH SYSTEM
E.H.	EXTRA HEAVY
EXTR.	EXTRUDED
E.S.P.	EXTERNAL STATIC PRESSURE

F

FAB.	FABRICATED/FABRIC
F.F.	FACE-TO-FACE
F. FIN.	FACTORY FINISH
F.C.U.	FAN COIL UNIT
F.S.	FAR SIDE
FAS.	FASTENER
FDR	FEEDER
FT or '	FEET/FOOT
FPM	FEET PER MINUTE
FN	FENCE
F.BD.	FIBRE BOARD
FIG.	FIGURE
FIN.	FINISH/FINISHED
FIN. FLR/F.F.	FINISH FLOOR
F.T.R.	FINNED TUBE RADIATION
F.A.	FIRE ALARM
F.A.C.P.	FIRE ALARM CONTROL PANEL
F. BRK	FIRE BRICK
F.D.	FIRE DAMPER
F.E.	FIRE EXTINGUISHER
F.E.C.	FIRE EXTINGUISHER CABINET
F.H.C.	FIRE HOSE CABINET
F.H.	FIRE HYDRANT
F.L.	FIRE LINE
F.R.	FIRE RETARDANT/FIRE RATED
F.R.T.WD	FIRE RETARDANT TREATED WOOD
F.V.C.	FIRE VALVE CABINET
FPL	FIREPLACE
FPRFG.	FIREPROOFING
FXT.	FIXTURE
FL.	FLASHING
FHMS	FLAT HEAD MACHINE SCREW
FHWS	FLAT HEAD WOOD SCREW
F.C.	FLEXIBLE CONNECTION
FLR	FLOOR
F.C.O.	FLOOR CLEAN OUT
F.D.	FLOOR DRAIN
FLR. FIN.	FLOOR FINISH
FLUOR.	FLUORESCENT
FLDG	FOLDING
FTG	FOOTING
F.M. BD	FORMBOARD
FDN	FOUNDATION
FR.	FRAME
FR/COV.	FRAME AND COVER
FRMG	FRAMING
FRZR	FREEZER
F.S.	FULL SIZE
FURN.	FURNISH/FURNISHED
FURR.	FURRING/FURRED
FUT.	FUTURE

G

GA.	GAUGE
GAL.	GALLON
GPH	GALLONS PER HOUR
GPM	GALLONS PER MINUTE
GALV.	GALVANIZED
GALV. I.	GALVANIZED IRON
G	GAS
GSKT	GASKET
G.V.& B.	GATE VALVE AND BOX
GEN'L.	GENERAL
GL.	GLASS
GLZ	GLAZING
GLZ.H.T.	GLAZED HOLLOW TILE
G.B.	GRAB BAR
GR.	GRADE/GRILLE
GB	GRADE BEAM
GRAT.	GRATING
G.L.	GRID LINE
GRN	GRANITE
G.S.	GREASE SEPARATOR
G.T.	GREASE TRAP
GND	GROUND
G.F.I.	GROUND FAULT INTERRUPTOR
GT	GROUT
G.	GUTTER ELEVATION
GYP.	GYPSUM
GYP.BD.	GYPSUM BOARD

H

HNDCP	HANDICAPPED
H.R.	HANDRAIL
H.BD	HARDBOARD
HDWE	HARDWARE
HDWD	HARDWOOD
HD	HEAD
HDR	HEADER
H.A. GL.	HEAT ABSORBING GLASS
H.R.U.	HEAT RECOVERY UNIT
HTR	HEATER
HTG	HEATING
H/V	HEATING AND VENTILATING
H.V.A.C.	HEATING, VENTILATING AND AIR CONDITIONING
HWHR	HEATING HOT WATER SUPPLY
HWRS	HEATING HOT WATER RETURN
HGT	HEIGHT
HEX.	HEXAGON
H.	HIGH
H.I.D.	HIGH INTENSITY DISCHARGE
H.P.	HIGH POINT
H.PR.	HIGH PRESSURE
H.S.	HIGH STRENGTH
H.S.B.	HIGH STRENGTH BOLT
H.V.	HIGH VOLTAGE
HWY	HIGHWAY
HSTWY	HOISTWAY
H.C.	HOLLOW CORE
H.M.	HOLLOW METAL
HNYCB	HONEYCOMB
HK	HOOK
HORIZ.	HORIZONTAL
HP	HORSEPOWER
H.B.	HOSE BIBB
H.S.P.	HOSE STAND PIPE
H.V.C.	HOSE VALVE CABINET
HOSP.	HOSPITAL
H.W.	HOT WATER
HWR	HOT WATER RETURN
HWS	HOT WATER SUPPLY
HR.	HOUR
H.O.	HUB OUTLET
HYD.	HYDRANT/HYDRAULIC
H	HYDROGEN

I

I.D.	IDENTIFICATION
INCAND.	INCANDESCENT
IN or "	INCH/INCHES
INCIN.	INCINERATOR
INCL.	INCLUDE/INCLUDING
I.W.	INDIRECT WASTE
INFO.	INFORMATION
I.D.	INSIDE DIAMETER
I.F.	INSIDE FACE
INSTL.	INSTALL/INSTALLATION
INSUL.	INSULATE/INSULATION
INT.	INTERIOR
INTER.	INTERMEDIATE
INV.	INVERT
I.E.	INVERT ELEVATION

J

J.C.	JANITOR CLOSET
JT	JOINT
JST	JOIST
J.B.	JUNCTION BOX
JR	JUNIOR

K

K.P.	KICK PLATE
KV	KILOVOLT
KVA	KILOVOLT AMPHERE
KW	KILOWATT
K	KIP (1000#)
KIT.	KITCHEN
K.S.	KNEE SPACE
K.D.	KNOCK DOWN
K.O.P.	KNOCK-OUT PANEL

L

LBL.	LABEL
LAB.	LABORATORY
LAD.	LADDER
LB.	LAG BOLT
LAM.	LAMINATE/LAMINATED
LDG	LANDING
L-	LANDSCAPE DRAWING-NO.
LGE	LARGE
LDRY	LAUNDRY
LAV.	LAVATORY
L.H.	LEFT HAND
L.H.R.B.	LEFT HAND REVERSE BEVEL
LGTH	LENGTH
LEV.	LEVEL
LIB.	LIBRARY
LT.	LIGHT
LPRF	LIGHTPROOF
LTG	LIGHTING
L.P.	LIGHTING PANEL
L.R.P.	LIGHTING RECEPTACLE PANEL
LTWT	LIGHTWEIGHT
LTWT. CONC.	LIGHTWEIGHT CONCRETE
LMS	LIMESTONE
LTL	LINTEL
LIN. DIFF.	LINEAR DIFFUSER
L.F.	LINEAR FEET/FOOT
LIQ	LIQUID
LPG	LIQUID PROPANE GAS
L.P.G.	LIQUID PETROLEUM GAS
L.L.	LIVE LOAD
L.R.	LIVING ROOM
LOC.	LOCATION
LKR	LOCKER
LG	LONG
L.L.H.	LONG LEG HORIZONTAL
L.L.V.	LONG LEG VERTICAL
LVR	LOUVER
L.O.	LOUVER OPENING
L.P.	LOW POINT
L.PR.	LOW PRESSURE
LBR	LUMBER
LBS. or #	POUNDS

M

MACH.	MACHINE
M.B.	MACHINE BOLT
MACH. RM	MACHINE ROOM
M.A.U.	MAKE-UP AIR UNIT
M.D.P.	MAIN DISTRIBUTION PANEL
M.S.B.	MAIN SWITCH BOARD
MAINT.	MAINTENANCE
MH.	MANHOLE
MFR	MANUFACTURER
MAR.	MARBLE
MK	MARK
MAS.	MASONRY
M.O.	MASONRY OPENING
MATL	MATERIAL
MAX.	MAXIMUM
MECH.	MECHANICAL
M-	MECHANICAL DRAWING-NO.
M.C.	MEDICINE CABINET
MED.	MEDIUM
MEMB.	MEMBRANE
MET.	METAL
M.D.S.	METAL DIVIDER STRIP
M.E.S.	METAL EDGE STRIP
M.L.	METAL LATH
M.L.& PLAS.	METAL LATH AND PLASTER
M.T.	METAL THRESHOLD
MET. W.P.	METALLIC WATERPROOFING
MEZZ.	MEZZANINE
MDOT	MICHIGAN DEPARTMENT OF TRANSPORTATION
MWK	MILLWORK
MIN.	MINIMUM
MIR.	MIRROR
M.&S.	MIRROR AND SHELF
MISC.	MISCELLANEOUS
M.I.	MISCELLANEOUS IRON
MOD.	MODEL
MON.	MONUMENT
M.S.& S.	MOP STRIP AND SHELF
M.O.D.	MOTOR OPERATED DAMPER
MLDG	MOULDING
MTD	MOUNTED
MTG	MEETING/MOUNTING
MOV.	MOVEABLE
MOV. PARTN.	MOVEABLE PARTITION
MULL	MULLION
M	THOUSAND (1000)

N

NAT.	NATURAL
N.S.	NEAR SIDE
NEUT.	NEUTRAL
NRC	NOISE REDUCTION COEFFICIENT
NOM.	NOMINAL
NOR.	NORMAL
N	NORTH
NOS.	NOSING
N.I.C.	NOT-IN-CONTRACT
N.T.S.	NOT-TO-SCALE
NO. or #	NUMBER

O

OBS.	OBSCURE
OBS.GL.	OBSCURE GLASS
OFF.	OFFICE
O.C.	ON CENTER
OPQ.	OPAQUE
OPG.	OPENING
OPER.	OPERATOR
OPP.	OPPOSITE
OPP.HD.	OPPOSITE HAND
ORIG.	ORIGINAL
ORN.	ORNAMENTAL
OZ.	OUNCE
O/O	OUT-TO-OUT
O.A.	OUTSIDE AIR
O.D.	OUTSIDE DIAMETER
O.F.	OUTSIDE FACE
O.H.S.	OVAL HEAD SCREW
O.A.	OVERALL
OHD	OVERHEAD
OHD.DR	OVERHEAD DOOR
OXY.	OXYGEN

P

PTD	PAINTED
PR	PAIR
PG.	PAGE
PNL.	PANEL
P.T.D.	PAPER TOWEL DISPENSER
P.T.W.R.	PAPER TOWEL WASTE RECEPTACLE
PRL	PARALLEL
PKG	PARKING
P.BD	PARTICLE BOARD
PRTN	PARTITION
PASS.	PASSAGE
PAT.	PATENT
PVMT	PAVEMENT
PVG	PAVING
PED.	PEDESTAL
PERF.	PERFORATED
PERM.	PERIMETER
PERM.	PERMANENT
PERP.	PERPENDICULAR
P. or ℘	PHASE
PHOTO.	PHOTOGRAPH
P.H.	PHYSICALLY HANDICAPPED
PC.	PIECE
PCS.	PIECES
PLAS.	PLASTER
PL. LAM.	PLASTIC LAMINATE
PL.	PLATE
PL. GL.	PLATE GLASS
PLAT.	PLATFORM
PLBG	PLUMBING
PLWD	PLYWOOD
PT	POINT
P.T.	POINT OF TANGENCY
P.C.	POINT OF CURVATURE
POL.	POLISH/POLISHED
PVC	POLYVINYLCHLORIDE
PORC.	PORCELAIN
PORC. ENAM.	PORCELAIN ENAMEL
POR.	POROUS
PORT.	PORTABLE
POS.	POSITION
P.I.V.	POST INDICATOR VALVE
PLF	POUNDS PER LINEAR FOOT
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PCF	POUNDS PER CUBIC FOOT
P.P	POWER PANEL
P/C	PRECAST
P.T.R.	PRECAST TERRAZZO RECEPTOR
PREFAB.	PREFABRICATED
PFN.	PREFINISHED
P.T.WD	PRESERVATIVE TREATED WOOD
P.G.	PRESSURE GAUGE
P.R.V.	PRESSURE REDUCING VALVE
PRIM.	PRIMARY
PROJ.	PROJECT/PROJECTION
PROP.	PROPERTY/PROPOSED
P.L.	PROPERTY LINE
P.A.	PUBLIC ADDRESS
P.S.	PURSE SHELF
P.B.	PUSH BUTTON

Q

QTY	QUANTITY
Q.T.	QUARRY TILE
QTR	QUARTER
QTR. RD	QUARTER ROUND

R

RBT	RABBET
RAD. or R.	RADIUS
R.W.C.	RAIN WATER CONDUCTOR
R.R.	RAILROAD
RECV.	RECEIVE/RECEIVING
RECPT.	RECEPTACLE
R.P.	RECEPTACLE PANEL
REC.	RECESS
RECT.	RECTANGLE/RECTANGULAR
RED.	REDUCER
RWD	REDWOOD
REF.	REFER/REFERENCE
REFL.	REFLECTED/REFLECTIVE
REFR.	REFRIGERATOR
REG.	REGISTER
REINF.	REINFORCE/REINFORCING/ REINFORCEMENT
REM.	REMOVE/REMOVABLE
REP.	REPAIR
REQ'D.	REQUIRED
RESIL.	RESILIENT
RET.	RETURN
R.A.	RETURN AIR
R.A.D.	RETURN AIR DIFFUSER
R.A.F.	RETURN AIR FAN
REV.	REVISED/REVISION
RPM	REVOLUTIONS PER MINUTE
R.	RISER
R.H.	RIGHT HAND
R.H.R.B.	RIGHT HAND REVERSE BEVEL
R.O.W.	RIGHT OF WAY
RIV.	RIVET
RD	ROAD
R.S.C.	ROLLING STEEL CURTAIN
RF	ROOF
R.C.	ROOF CONDUCTOR
R.D.	ROOF DRAIN
RF.H.	ROOF HATCH
R.S.	ROOF SUMP
R.V.	ROOF VENTILATOR
RFG	ROOFING
R.T.U.	ROOF TOP UNIT
RM	ROOM
R.O.	ROUGH OPENING
RND or ◴	ROUND
RHMS	ROUND HEAD MACHINE SCREW
RHWS	ROUND HEAD WOOD SCREW
R.T.	RUBBER TILE

S

SAN.	SANITARY
S.N.D.	SANITARY NAPKIN DISPENSER
S.N.R.	SANITARY NAPKIN RECEPTACLE
SCHED.	SCHEDULE
SCN	SCREEN
STG	SEATING
SECT.	SECTION
SERV.	SERVICE
S.S.	SERVICE SINK
SHTHG	SHEATHING
SHT	SHEET
SHT. MET.	SHEET METAL
SH.& R.	SHELF AND ROD
SHWR	SHOWER
S.C.R.	SHOWER CURTAIN ROD
S.DR	SHOWER DOOR
S.W.	SIDEWALK
SIM.	SIMILAR
SGL.	SINGLE
SK	SINK
S.D.	SOAP DISPENSER
S.C.	SOLID CORE
STC	SOUND TRANSMISSION CLASS
S	SOUTH
SP.	SPACE
SPR.	SPARE
SPKR	SPEAKER
SPEC.	SPECIFICATIONS
S.D.	SPLITTER DAMPER
SPRYD	SPRAYED
SPKLR	SPRINKLER
SQ.	SQUARE
S.F.	SQUARE FEET/SQUARE FOOT
STAG.	STAGGERED
ST.STL	STAINLESS STEEL
STD	STANDARD
SP.	STANDPIPE
S.P.	STATIC PRESSURE
STA.	STATION
STM	STEAM
STL.	STEEL
STL. PL.	STEEL PLATE
STIFF.	STIFFENER
STO. FR.	STOREFRONT
STOR.	STORAGE
STR.	STRAIGHT
ST.	STREET
STRUCT.	STRUCTURAL
S-	STRUCTURAL DRAWING-NO.
S.G.F.T.	STRUCTURAL GLAZED FACING TILE
S.STL	STRUCTURAL STEEL
SS.D.	SUBSOIL DRAIN
SS.D.C.	SUBSOIL DRAIN CONNECTION
SUB.	SUBSTATION
S.A.G.	SUPPLY AIR GRILLE
S.D.	SUPPLY DIFFUSER/ DUCT
SUBST.	SUSTITUTE
S.A.R.	SUPPLY AIR REGISTER
S.F.	SUPPLY FAN

T

T.BD	TACKBOARD
TAN.	TANGENT
TECHN.	TECHNICAL
TEL.	TELEPHONE
TEL. CAB.	TELEPHONE CABINET
TV	TELEVISION
TV.M	TELEVISION MONITOR
TEMP.	TEMPERATURE
TEMP. GL.	TEMPERED GLASS
T.U.	TERMINAL UNIT
TERR.	TERRAZZO
T.B.	TEST BORING
T.	THERMOSTAT
THK	THICK/ THICKNESS
T.S.	THICKENED SLAB
THD	THREAD
THRESH.	THRESHOLD
THRU	THROUGH
T.	TILE
T./ TOIL.	TOILET
T.P.D.	TOILET PAPER DISPENSER
T.P.H.	TOILET PAPER HOLDER
T & G	TONGUE AND GROOVE
T & B	TOP AND BOTTOM
T/C	TOP OF CURB
T/EL.	TOP ELEVATION
T/F	TOP OF FOOTING
T/G	TOP OF GUTTER
T/M	TOP OF MASONRY
T/P	TOP OF PARAPET
T/P	TOP OF PAVEMENT
T/R	TOP OF RIM
T/S	TOP OF STEEL
T/W	TOP OF WALL
T.B.	TOWEL BAR
T.D.	TOWEL DISPENSER
TD & WR	TOWEL DISPENSER AND WASTE RECEPTACLE
T.G.	TRANSFER GRILLE
TRFR	TRANSFORMER
TRAN.	TRANSOM
T	TREAD
T.D.	TRENCH DRAIN
TS	TUBE SECTION
T.V.	TURNING VANE
T.T.	TWIN TEE
TYP.	TYPICAL

U

U.C.	UNDERCUT
U.G.	UNDER GROUND
UL	UNDERWRITER'S LABORATORY
ULT.	ULTIMATE
UNFIN.	UNFINISHED
U.H.	UNIT HEATER
U.SUB.	UNIT SUBSTATION
U.V.	UNIT VENTILATOR
USGS	UNITED STATES GEOLOGICAL SURVEY
U.O.N.	UNLESS OTHERWISE NOTED
UR.	URINAL

V

VAC.	VACUUM
V.B.	VACUUM BREAKER
V.C.O.	VACUUM CLEANER OUTLET
V. BARR.	VAPOR BARRIER
VAR.	VARIABLE
VARN.	VARNISH
VNR	VENEER
V. PLAS.	VENEER PLASTER
V.	VENT
VTR	VENT THRU ROOF
VENT.	VENTILATE/ VENTILATION
V.I.F.	VERIFY IN FIELD
VS.	VERSUS
VERT.	VERTICAL/ VERTICALLY
VERT. C.	VERTICAL CURVE
VEST.	VESTIBULE
V.I.	VIBRATION ISOLATOR
VNY	VINYL
VCT	VINYL COMPOSITION TILE
VIN. FAB.	VINYL FABRIC
V.R.S.	VINYL REDUCER STRIP
VIT.	VITREOUS
VCP	VITRIFIED CLAY PIPE
VOL.	VOLUME
V.D.	VOLUME DAMPER
V	VOLTS

W

WAINS.	WAINSCOT
W.CAB.	WALL CABINET
W.C.O.	WALL CLEAN OUT
W.H.	WALL HYDRANT
W/W	WALL-TO-WALL
W.V.	WALL VENT
WHSE	WAREHOUSE
W.F.	WASH FOUNTAIN
W.	WASTE/ WATTS
W.& V	WASTE AND VENT
W.R.	WASTE RECEPTACLE
W.C.	WATER CLOSET
W.G.	WATER GAUGE
W.H.	WATER HEATER
WP	WATERPROOFING
W.PRFG.	WEATHERPROOFING
W.STPG.	WEATHERSTRIPPING
WT.	WEIGHT
W.W.F.	WELDED WIRE FABRIC
W	WEST
W.B.	WET BULB
W.	WIDE/ WIDTH
W.-x-.	WIDE FLANGE SECTION
WT.	WIDE FLANGE TEE SECTION
W.O.	WINDOW OPENING
W.GL.	WIRE GLASS
W.M.	WIRE MESH
w/	WITH
w/o	WITHOUT
WD	WOOD
W.L.	WORK LINE
W.P.	WORK POINT
W.I.	WROUGHT IRON

X

Y

YD	YARD
Y.P.	YIELD POINT
Y.S.	YIELD STRENGTH
YR	YEAR

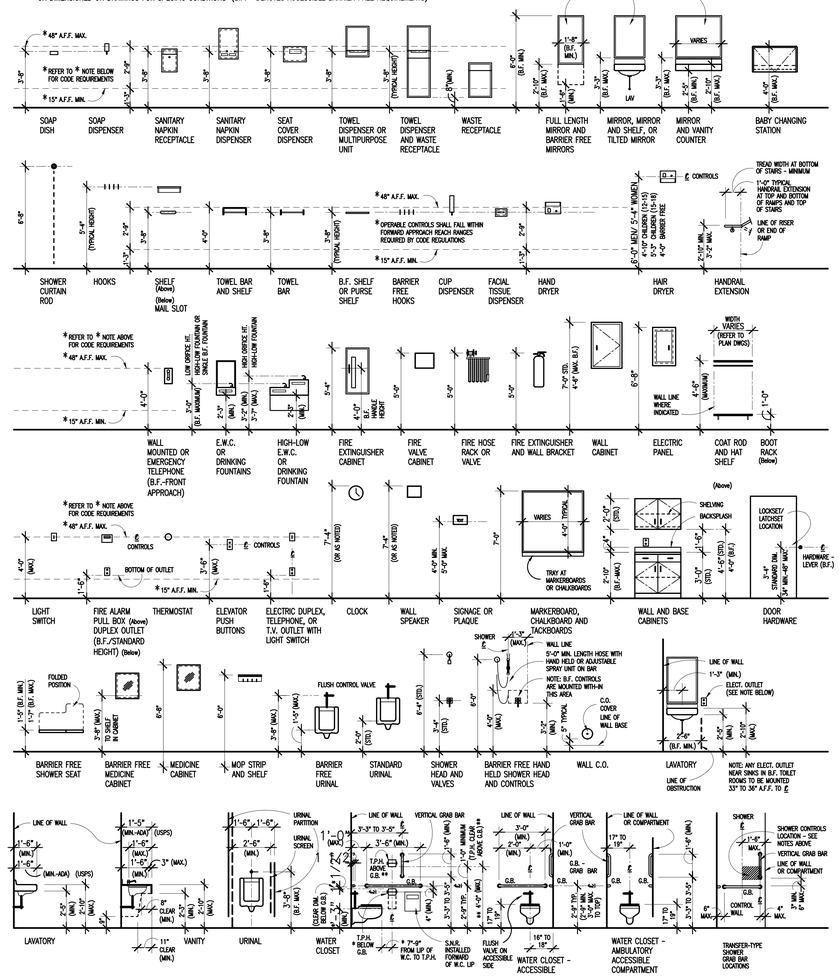
Z

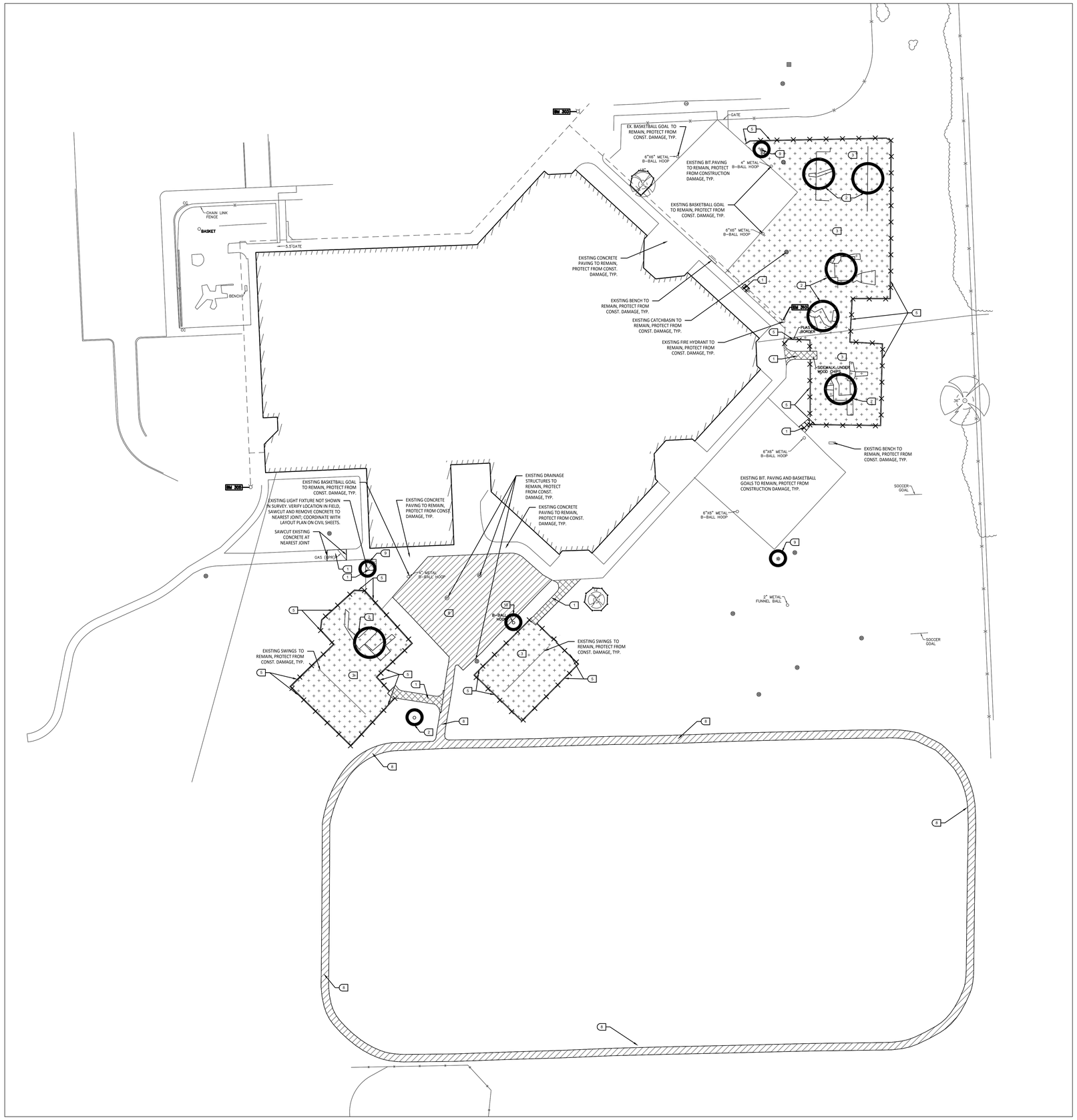
ZC	ZINC

TYPICAL MOUNTING HEIGHTS

MISCELLANEOUS ACCESSORIES, TOILET ACCESSORIES AND FIXTURES

NOTE: MOUNTING HEIGHTS SHOWN ARE PROPOSED FOR ALL ACCESSORIES AND FIXTURES REQUIRED UNLESS OTHERWISE NOTED OR DIMENSIONED ON DRAWINGS FOR SPECIFIC CONDITIONS (B.F. - DENOTES ACCESSIBLE BARRIER FREE REQUIREMENTS)


* 48" A.F.F. MAX.
* REFER TO * NOTE BELOW FOR CODE REQUIREMENTS
* 15" A.F.F. MIN.
SOAP DISH
SOAP DISPENSER
SANITARY NAPKIN RECEPTACLE
SANITARY NAPKIN DISPENSER
SEAT COVER DISPENSER
TOWEL DISPENSER OR MULTIPURPOSE UNIT
TOWEL DISPENSER AND WASTE RECEPTACLE
WASTE RECEPTACLE
MIRROR SIZE AS SPECIFIED OR NOTED.
FULL LENGTH MIRROR AND BARRIER FREE MIRRORS
MIRROR, MIRROR AND SHELF, OR TILTED MIRROR
LAV.
VARIES
MIRROR AND VANITY COUNTER
BABY CHANGING STATION
SHOWER CURTAIN ROD
HOOKS
SHELF (Above) (Below) MAIL SLOT
TOWEL BAR AND SHELF
TOWEL BAR
B.F. SHELF OR PURSE SHELF
BARRIER FREE HOOKS
CUP DISPENSER
FACIAL TISSUE DISPENSER
HAND DRYER
HAIR DRYER
HANDRAIL EXTENSION
* 48" A.F.F. MAX.
* OPERABLE CONTROLS SHALL FALL WITHIN FORWARD APPROACH REACH RANGES REQUIRED BY CODE REGULATIONS
* 15" A.F.F. MIN.
℄ CONTROLS
TREAD WIDTH AT BOTTOM OF STAIRS - MINIMUM
1'-0" TYPICAL HANDRAIL EXTENSION AT TOP AND BOTTOM OF RAMPS AND TOP OF STAIRS
LINE OF RISER OR END OF RAMP
* REFER TO * NOTE ABOVE FOR CODE REQUIREMENTS
* 48" A.F.F. MAX.
* 15" A.F.F. MIN.
LOW DRINKING FT. HIGH-LOW FOUNTAIN OR SINGLE B.F. FOUNTAIN
HIGH DRINKING FT. HIGH-LOW FOUNTAIN
WALL MOUNTED OR EMERGENCY TELEPHONE (B.F.-FRONT APPROACH)
E.W.C. OR DRINKING FOUNTAINS
HIGH-LOW E.W.C. OR DRINKING FOUNTAIN
FIRE EXTINGUISHER CABINET
FIRE VALVE CABINET
FIRE HOSE RACK OR VALVE
FIRE EXTINGUISHER AND WALL BRACKET
WALL CABINET
ELECTRIC PANEL
WIDTH VARIES (REFER TO PLAN DWGS)
WALL LINE WHERE INDICATED
COAT ROD AND HAT SHELF
BOOT RACK (Below)
* REFER TO * NOTE ABOVE FOR CODE REQUIREMENTS
* 48" A.F.F. MAX.
CONTROLS
BOTTOM OF OUTLET
* 15" A.F.F. MIN.
℄ CONTROLS
(Above)
SHELVING
BACKSPLASH
LOCKSET/ LATCHSET LOCATION
HARDWARE - LEVER (B.F.)
LIGHT SWITCH
FIRE ALARM PULL BOX (Above) DUPLEX OUTLET (B.F./STANDARD HEIGHT)



1 **Overall Demolition Plan**
SCALE: 1" = 30'-0"

0 30 60 90
North
SCALE IN FEET

SITE DEMOLITION KEY

1	SAWCUT AND REMOVE EXISTING CONCRETE PAVING INCLUDING SUB-BASE.
2	REMOVE EXISTING PLAY EQUIPMENT INCLUDING ALL CONCRETE FOOTINGS. DESTROY ALL PLAY EQUIPMENT COMPLETELY SO THAT IT CANNOT BE RE-ASSEMBLED.
3	REMOVE EXISTING PLAY SAFETY SURFACING, INCLUDING DRAINAGE AGGREGATE.
4	PLAYGROUND CONTRACTOR TO SALVAGE EXISTING PLAY EQUIPMENT AND RE-INSTALL ON-SITE.
5	REMOVE EXISTING PLAY EDGING COMPLETELY.
6	N/A
7	N/A
8	SAWCUT AND REMOVE EXISTING BITUMINOUS PAVEMENT INCLUDING SUB-BASE.
9	OWNER TO CONFIRM POWER DISCONNECTION FROM LIGHT FIXTURE. SITE CONTRACTOR TO CUT WIRE AT A MINIMUM OF 24" BELOW FINISHED GRADE.
10	SALVAGE EXISTING PLAY EQUIPMENT, PLAYGROUND CONTRACTOR TO REINSTALL ON SITE.
11	SALVAGE EXISTING SITE FURNISHINGS AND REINSTALL AT LOCATION TO BE DETERMINED.
12	N/A

DEMOLITION NOTES:

1. SURVEY OF EXISTING CONDITIONS PROVIDED BY PEA GROUP, 1849 POND RUN, AUBURN HILLS, MI, 48326. 248-689-9090.
2. VERIFY LOCATIONS OF ALL BELOW GRADE UTILITIES PRIOR TO BEGINNING WORK. 72 HOURS BEFORE YOU DIG CALL "MISS DIG" AT 1-800-482-7171.
3. PROTECT ALL TREES & EXISTING FEATURES TO REMAIN AS SPECIFIED.
4. REFER TO LAYOUT PLAN FOR LIMITS OF WORK.
5. DISCREPANCIES BETWEEN SITE AND PLANS SHOULD BE REPORTED TO THE PROJECT MANAGER IMMEDIATELY.
6. ALL TOPSOIL AND EXCESS FILL MATERIAL SHALL BE STOCKPILED ON SITE SEPARATELY FOR LATER RE-USE. LOCATE STOCKPILES IN AREAS AS DIRECTED BY CONSTRUCTION MANAGER AND PROTECT FROM EFFECTS OF EROSION.
7. ALL PAVEMENT DEMOLITION TO BE SAWCUT AND REMOVED COMPLETELY, INCLUDING BASE/SUBBASE MATERIALS.
8. ALL EXISTING PLAYGROUND EQUIPMENT TO BE REMOVED **MUST BE DESTROYED COMPLETELY** SO THAT IT CANNOT BE RE-ASSEMBLED. THE CONTRACTOR IS NOT ALLOWED TO RE-USE, DONATE, OR SELL ANY EXISTING PLAYGROUND EQUIPMENT SCHEDULED TO BE DEMOLISHED.
9. IN LOCATIONS WHERE PROPOSED PAVING WILL BE INSTALLED WHERE EXISTING PAVING WAS REMOVED, THE BASE MATERIAL MAY BE LEFT IN PLACE PROVIDED IT IS TESTED TO BE ADEQUATE IN BOTH DEPTH AND GRADATION. IF EITHER OF THESE IS INADEQUATE, THE BASE MATERIAL SHOULD BE REMOVED AND REPLACED.

DEMOLITION LEGEND:

- SAWCUT AND REMOVE BITUMINOUS PAVEMENT AND BASE
- SAWCUT AND REMOVE CONCRETE PAVEMENT, INCLUDING SUBBASE
- REMOVE PLAY SAFETY SURFACING INCLUDING DRAINAGE AGGREGATE
- NO WORK, PARKING OR STORAGE IN THIS SHADED AREA
- REMOVE TREE
- REMOVE EXISTING FENCE
- SAWCUT & REMOVE CONCRETE CURB & GUTTER
- REMOVE MISCELLANEOUS FEATURE AS NOTED
- RELOCATE EXISTING SITE LIGHTING PER ELEC. PLAN
- TEMPORARY TREE PROTECTION FENCE, REFER TO DETAIL 1/C4.0

TREE PROTECTION NOTES:

PROVIDE AND MAINTAIN TEMPORARY TREE PROTECTION FENCING IN ALL LOCATIONS MARKED ●——●——●——●——●. TREE FENCING SHALL BE PROVIDED AND IN PLACE PRIOR TO ANY WORK ON SITE (INCLUDING TOPSOIL STRIPPING OPERATIONS). REFER TO THE FOLLOWING NOTES AND THE SPECIFICATIONS FOR TREE PROTECTION REQUIREMENTS.

1. NO CONSTRUCTION OPERATIONS, EQUIPMENT, MATERIALS OR TOPSOIL SHALL BE ALLOWED WITHIN THE TREE PROTECTION AREAS.
2. EXISTING GROUND COVER AND TOPSOIL SHALL NOT BE REMOVED FROM TREE PROTECTION AREAS DURING EARTHWORK PHASE.
3. VEHICULAR TRAFFIC, PARKING, EQUIPMENT OR MATERIAL STORAGE MAY NOT OCCUR WITHIN THE TREE PROTECTION AREAS AT ANY TIME.
4. NO EXCAVATION SHALL BE MADE WITHIN THE TREE PROTECTION AREAS EXCEPT AS NOTED OTHERWISE.

TMP ARCHITECTURE

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Landscape Architecture
Urban Planning
Parks & Recreation
Campus & Institutional Planning
Camp Planning & Design

PROJECT TITLE
Wass Elementary School Playground Remodel Bid Package No.01B

Troy School District Troy, Michigan

DRAWING TITLE
Demolition Plan

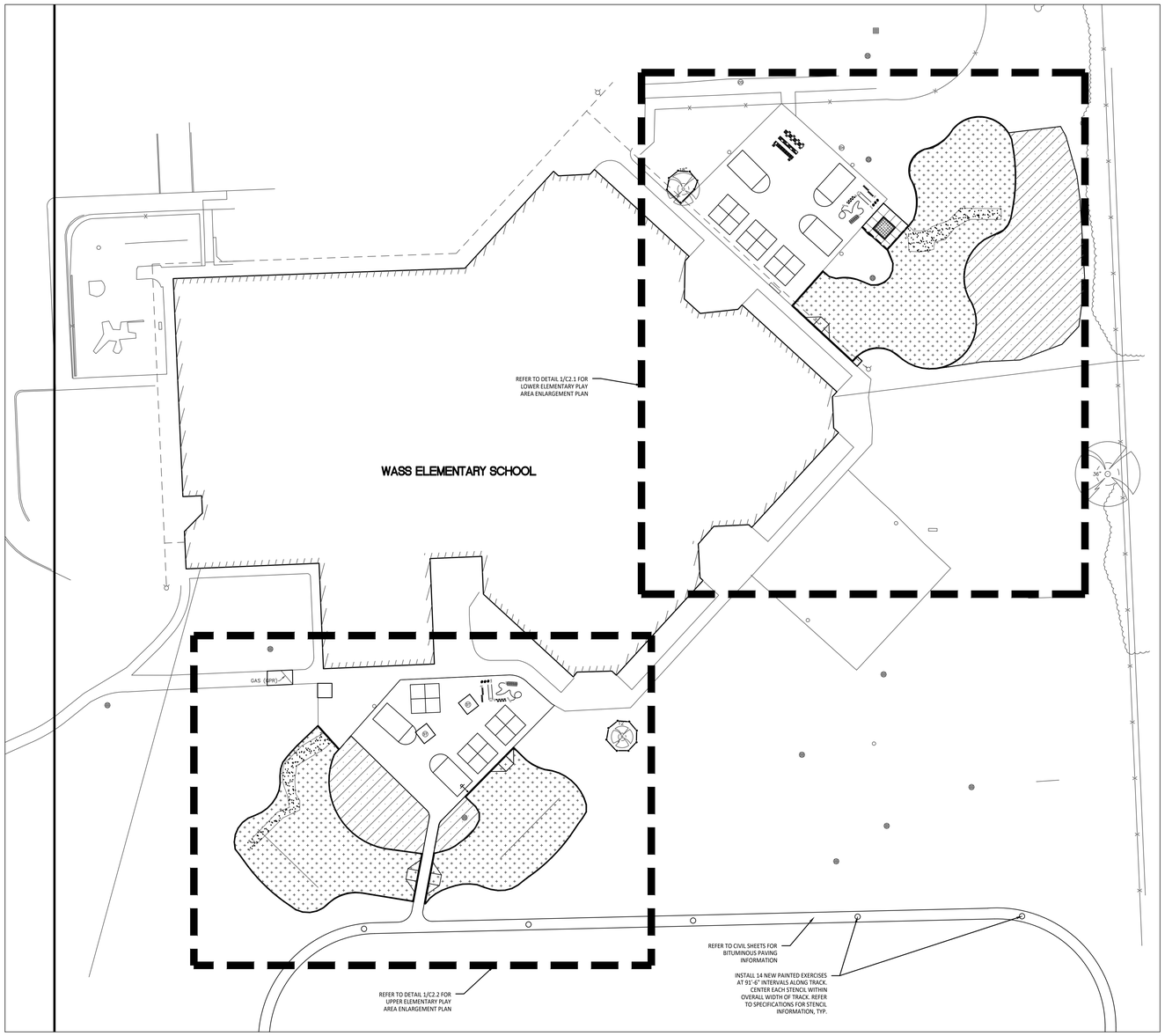
ISSUE DATES

10-03-2024	CONSTRUCTION DOCUMENTS

DATE:	ISSUED FOR:
DRAWN	DID
CHECKED	DID
APPROVED	DID

PROJECT NO.
22096B

DRAWING NO.
C1.0



1 Overall Playground Layout Plan

Scale: 1" = 30'-0"

0 30 60 90

North

SCALE IN FEET

BARRIER-FREE NOTES

BARRIER-FREE PARKING AND ACCESSIBLE ROUTE(S) MUST COMPLY WITH THE AMERICANS WITH DISABILITIES ACT AND MICHIGAN BARRIER-FREE CODE REQUIREMENTS, INCLUDING BUT NOT LIMITED TO THE FOLLOWING:

- 1:50 (2%) MAXIMUM CROSS-SLOPE ON ACCESSIBLE ROUTE.
- NO CHANGES IN LEVEL GREATER THAN 1/2" ALONG ACCESSIBLE ROUTE.
- 1:20 (5%) MAXIMUM LONGITUDINAL SLOPE ON ACCESSIBLE ROUTE (EXCEPT WHERE RAMPS ARE PROVIDED).
- 1:50 (2%) MAXIMUM SLOPE (IN ANY DIRECTION) IN B.F. PARKING AND ACCESS AISLES.

NOTE: PLAYGROUND EQUIPMENT AND SURFACING PURCHASE AND INSTALLATION IS UNDER SEPARATE CONTRACT AND IS NOT INCLUDED IN THIS BID PACKAGE. CONTRACTOR IS REQUIRED TO COORDINATE INSTALLATION OF PLAYGROUND EQUIPMENT AND SURFACING WITH PLAYGROUND INSTALLER PRIOR TO ANY EXCAVATION AND CONCRETE CURBING OR PAVING INSTALLATION.

NOTE: VERIFY LOCATION OF NEW PLAYGROUND EQUIPMENT PRIOR TO INSTALLATION OF ANY CONCRETE CURB. CONCRETE CURB TO BE INSTALLED OUTSIDE OF FALL SAFETY ZONE OF EACH PIECE OF EQUIPMENT PER ASTM 1487-05 AND MANUFACTURER'S WRITTEN RECOMMENDATIONS.

LAYOUT NOTES:

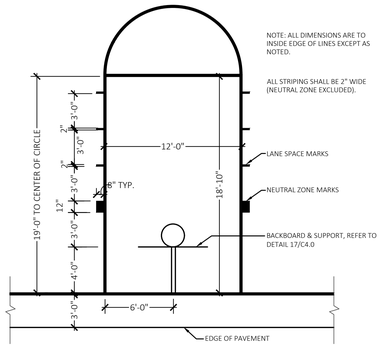
1. SURVEY OF EXISTING CONDITIONS PROVIDED BY PEA GROUP, 1849 POND RUN, AUBURN HILLS, MICHIGAN 48326, (248)689-9090.
2. PAVEMENT DIMENSIONS AND RADII ARE TO EDGE OF PAVEMENT OR BACK OF CURB. PLASTIC EDGING IS MEASURED TO/FROM CENTER OF PIN.
3. DISCREPANCIES BETWEEN SITE AND PLANS SHOULD BE REPORTED TO THE PROJECT MANAGER IMMEDIATELY.
4. VERIFY LOCATIONS OF ALL BELOW GRADE UTILITIES PRIOR TO BEGINNING WORK. 72 HOURS BEFORE YOU DIG CALL "MISS DIG" AT 1-800-482-7171.
5. PROVIDE BARRIER FREE PARKING SIGNS FOR ALL BARRIER FREE PARKING SPACES. ALL SIGNS TO COMPLY WITH THE MDOT MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.
6. SITE LAYOUT POINTS SHOULD BE ESTABLISHED AND PROTECTED FOR FUTURE SITE WORK.

PROPOSED FEATURES LEGEND:

SYMBOL	DESCRIPTION
C	RESILIENT SURFACING (BY OTHERS)
D	LOOSE FILL SAFETY SURFACING (BY OTHERS)
F	N/A
N	N/A
P	N/A
	PLAY HILL, REFER TO CIVIL DRAWINGS
	PLASTIC PLAY EDGING, BY OTHERS REFER TO PLAYGROUND CONTRACTOR'S DRAWINGS AND SPECS
	STRAIGHT FACE CONCRETE CURB
	THICKENED EDGE CONCRETE
	INTEGRAL WALK AND CURB
	BARRIER-FREE PLAY AREA ENTRANCE RAMP
	ENLARGEMENT LIMIT LINE

KEY	DESCRIPTION	DETAIL
A	STRAIGHT FACE CONCRETE CURB	6 /C4.0
B	THICKENED EDGE CONCRETE	11 /C4.0
C	RESILIENT SURFACING (BY OTHERS)	7 /C4.0
D	LOOSE FILL SAFETY SURFACING (BY OTHERS)	3 & 9 /C4.0
E	PLASTIC PLAY EDGING (BY OTHERS)	12, 13, & 18 /C4.0
F	N/A	
G	CONCRETE WALK	2 /C4.0
H	PLAY AREA ENTRANCE RAMP	16 /C4.0
J	CONCRETE SAND BOX	15 /C4.0
K	BASKETBALL HOOP POLE (BY OTHERS)	17 /C4.0
L	N/A	
M	N/A	
N	N/A	
P	N/A	

SIGNS		
S1	COMMUNICATION BOARD; PURCHASED BY OWNER, INSTALLED BY SITE CONTRACTOR	SEE SPECS.



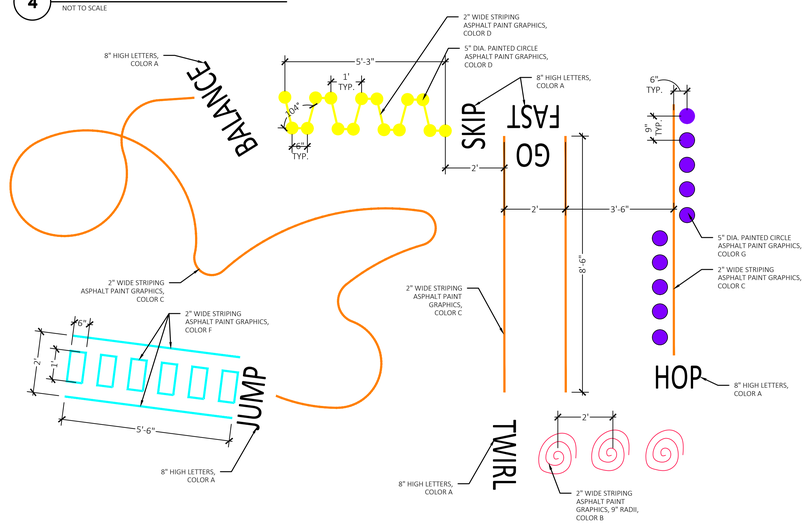
CONTRACTOR COORDINATION NOTES:

SITE CONTRACTOR AND PLAYGROUND CONTRACTOR ARE REQUIRED TO COORDINATE BOTH WITH EACH OTHER AND WITH CONSTRUCTION MANAGER. THE INSTALLATION PROCESS FOR THE PLAYGROUND SAFETY SURFACING SHOULD BE AS FOLLOWS:

* SITE CONTRACTOR TO EXCAVATE AREA AS SHOWN ON CONSTRUCTION DOCUMENTS.
* SITE CONTRACTOR TO INSTALL UNDERDRAINS AS SHOWN ON CONSTRUCTION DOCUMENTS. SITE CONTRACTOR TO USE LAYOUT SERVICES FROM CADD FILES FOR INSTALLATION TO ENSURE THAT THE UNDERDRAINS ARE INSTALLED IN THE CORRECT LOCATIONS.
* THE PLAYGROUND CONTRACTOR WILL THEN INSTALL THE POSTS AND FOOTINGS FOR ALL EQUIPMENT.
* THE SITE CONTRACTOR WILL THEN INSTALL THE DRAINAGE AGGREGATE, TAKING CARE TO NOT DAMAGE THE POSTS OR POWDERCOATING OF THE PLAY EQUIPMENT. THE SITE CONTRACTOR WILL ALSO INSTALL THE ADDITIONAL ENGINEERED FILL FOR THE RESILIENT SURFACING AREAS. THE SITE CONTRACTOR MUST COORDINATE THE DEPTHS WITH THE PLAYGROUND CONTRACTOR PRIOR TO INSTALLATION AS THE DEPTHS VARY BETWEEN PLAYGROUND CONTRACTORS.
* THE PLAYGROUND CONTRACTOR WILL INSTALL THE GEOTEXTILE FABRIC, PLAYGROUND EQUIPMENT, AND SAFETY SURFACING.

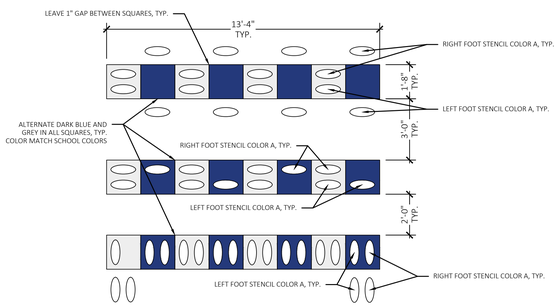
4 Basketball Lane Layout

NOT TO SCALE



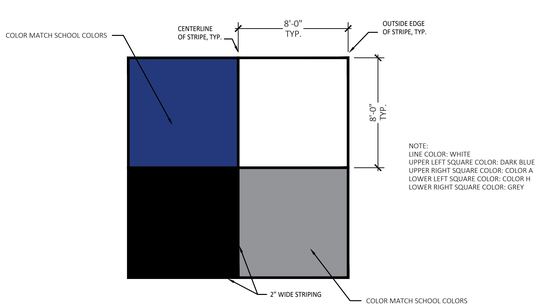
5 Silly Track Layout Detail

Not to Scale



2 Fitness Agility Ladder Layout Detail

Not to Scale



3 4 Square Layout Detail

Not to Scale

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Landscape Architecture
Urban Planning
Parks & Recreation
Campus & Institutional Planning
Camp Planning & Design

PROJECT TITLE

Wass Elementary School Playground Remodel Bid Package No.01B

Troy School District
Troy, Michigan

DRAWING TITLE
Overall Playground Layout Plan

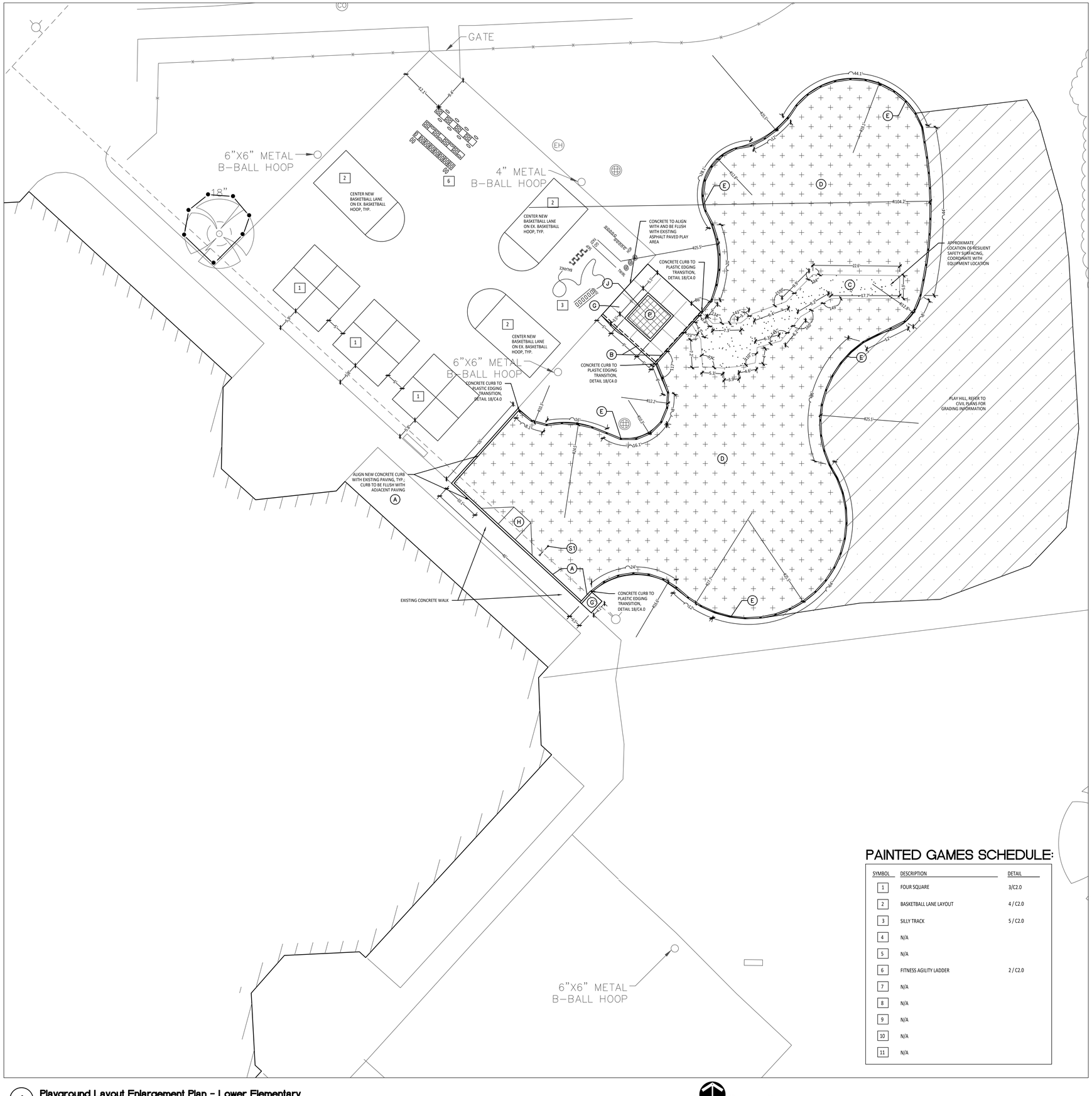
ISSUE DATES

DATE:	ISSUED FOR:
10-03-2024	CONSTRUCTION DOCUMENTS

DRAWN	DID
CHECKED	DID
APPROVED	DID

PROJECT NO.
22096B

DRAWING NO.
C2.0



PAINTED GAMES SCHEDULE:

SYMBOL	DESCRIPTION	DETAIL
1	FOUR SQUARE	3/C2.0
2	BASKETBALL LANE LAYOUT	4 / C2.0
3	SILLY TRACK	5 / C2.0
4	N/A	
5	N/A	
6	FITNESS AGILITY LADDER	2 / C2.0
7	N/A	
8	N/A	
9	N/A	
10	N/A	
11	N/A	

1 **Playground Layout Enlargement Plan - Lower Elementary**
Scale: 1" = 10'-0"

0 10 20 30
SCALE IN FEET
North

LAYOUT NOTES:

1. SURVEY OF EXISTING CONDITIONS PROVIDED BY PEA GROUP, 1849 POND RUN, AUBURN HILLS, MICHIGAN 48326, (248)689-9090.
2. PAVEMENT DIMENSIONS AND RADII ARE TO EDGE OF PAVEMENT OR BACK OF CURB. PLASTIC EDGING IS MEASURED TO/FROM CENTER OF PIN.
3. DISCREPANCIES BETWEEN SITE AND PLANS SHOULD BE REPORTED TO THE PROJECT MANAGER IMMEDIATELY.
4. VERIFY LOCATIONS OF ALL BELOW GRADE UTILITIES PRIOR TO BEGINNING WORK. 72 HOURS BEFORE YOU DIG CALL "MISS DIG" AT 1-800-482-7171.
5. PROVIDE BARRIER FREE PARKING SIGNS FOR ALL BARRIER FREE PARKING SPACES. ALL SIGNS TO COMPLY WITH THE MDOT MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.
6. SITE LAYOUT POINTS SHOULD BE ESTABLISHED AND PROTECTED FOR FUTURE SITE WORK.

BARRIER-FREE NOTES

BARRIER-FREE PARKING AND ACCESSIBLE ROUTE(S) MUST COMPLY WITH THE AMERICANS WITH DISABILITIES ACT AND MICHIGAN BARRIER-FREE CODE REQUIREMENTS, INCLUDING BUT NOT LIMITED TO THE FOLLOWING:

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NOTE: VERIFY LOCATION OF NEW PLAYGROUND EQUIPMENT PRIOR TO INSTALLATION OF ANY CONCRETE CURB. CONCRETE CURB TO BE INSTALLED OUTSIDE OF FALL SAFETY ZONE OF EACH PIECE OF EQUIPMENT PER ASTM 1487-05 AND MANUFACTURER'S WRITTEN RECOMMENDATIONS.

NOTE: PLAYGROUND EQUIPMENT AND SURFACING PURCHASE AND INSTALLATION IS UNDER SEPARATE CONTRACT AND IS NOT INCLUDED IN THIS BID PACKAGE. CONTRACTOR IS REQUIRED TO COORDINATE INSTALLATION OF PLAYGROUND EQUIPMENT AND SURFACING WITH PLAYGROUND INSTALLER PRIOR TO ANY EXCAVATION AND CONCRETE CURBING OR PAVING INSTALLATION.

PROPOSED FEATURES LEGEND:

SYMBOL	DESCRIPTION
C	RESILIENT SURFACING (BY OTHERS)
D	LOOSE FILL SAFETY SURFACING (BY OTHERS)
F	N/A
N	N/A
P	N/A
	PLAY HILL, REFER TO CIVIL DRAWINGS
	PLASTIC PLAY EDGING, BY OTHERS REFER TO PLAYGROUND CONTRACTOR'S DRAWINGS AND SPECS
	STRAIGHT FACE CONCRETE CURB
	THICKENED EDGE CONCRETE
	INTEGRAL WALK AND CURB
	BARRIER-FREE PLAY AREA ENTRANCE RAMP
	ENLARGEMENT LIMIT LINE

KEY	DESCRIPTION	DETAIL
A	STRAIGHT FACE CONCRETE CURB	6 /C4.0
B	THICKENED EDGE CONCRETE	11 /C4.0
C	RESILIENT SURFACING (BY OTHERS)	7 /C4.0
D	LOOSE FILL SAFETY SURFACING (BY OTHERS)	3 & 9 /C4.0
E	PLASTIC PLAY EDGING (BY OTHERS)	12, 13, & 18 /C4.0
F	N/A	
G	CONCRETE WALK	2 /C4.0
H	PLAY AREA ENTRANCE RAMP	16 /C4.0
J	CONCRETE SAND BOX	15 /C4.0
K	BASKETBALL HOOP POLE (BY OTHERS)	17 /C4.0
L	N/A	
M	N/A	
N	N/A	
P	N/A	
SIGNS		
S1	COMMUNICATION BOARD; PURCHASED BY OWNER, INSTALLED BY SITE CONTRACTOR	SEE SPECS.

CONTRACTOR COORDINATION NOTES:

SITE CONTRACTOR AND PLAYGROUND CONTRACTOR ARE REQUIRED TO COORDINATE BOTH WITH EACH OTHER AND WITH CONSTRUCTION MANAGER. THE INSTALLATION PROCESS FOR THE PLAYGROUND SAFETY SURFACING SHOULD BE AS FOLLOWS:

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* THE PLAYGROUND CONTRACTOR WILL THEN INSTALL THE POSTS AND FOOTINGS FOR ALL EQUIPMENT.
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* THE PLAYGROUND CONTRACTOR WILL INSTALL THE GEOTEXTILE FABRIC, PLAYGROUND EQUIPMENT, AND SAFETY SURFACING.

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Fax (269) 381-2944

Landscape Architecture
Urban Planning
Parks & Recreation
Campus & Institutional Planning
Camp Planning & Design

PROJECT TITLE

Wass Elementary School Playground Remodel Bid Package No.01B

Troy School District
Troy, Michigan

DRAWING TITLE
Playground Layout Enlargement Plans

ISSUE DATES

DATE:	ISSUED FOR:
10-03-2024	CONSTRUCTION DOCUMENTS

DRAWN	DID
CHECKED	DID
APPROVED	DID

PROJECT NO.
22096B

DRAWING NO.
C2.1

1 **Playground Layout Enlargement Plan - Upper Elementary**
Scale: 1" = 10'-0"

SCALE IN FEET 0 10 20 30 North

CONTRACTOR COORDINATION NOTES:

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PAINTED GAMES SCHEDULE:

SYMBOL	DESCRIPTION	DETAIL
1	FOUR SQUARE	3/C2.0
2	BASKETBALL LANE LAYOUT	4 / C2.0
3	SILLY TRACK	5 / C2.0
4	N/A	
5	N/A	
6	FITNESS AGILITY LADDER	2 / C2.0
7	N/A	
8	N/A	
9	N/A	
10	N/A	
11	N/A	

LAYOUT NOTES:

1. SURVEY OF EXISTING CONDITIONS PROVIDED BY PEA GROUP, 1849 POND RUN, AUBURN HILLS, MICHIGAN 48326, (248)689-9090.
2. PAVEMENT DIMENSIONS AND RADII ARE TO EDGE OF PAVEMENT OR BACK OF CURB. PLASTIC EDGING IS MEASURED TO/FROM CENTER OF PIN.
3. DISCREPANCIES BETWEEN SITE AND PLANS SHOULD BE REPORTED TO THE PROJECT MANAGER IMMEDIATELY.
4. VERIFY LOCATIONS OF ALL BELOW GRADE UTILITIES PRIOR TO BEGINNING WORK. 72 HOURS BEFORE YOU DIG CALL "MISS DIG" AT 1-800-482-7171.
5. PROVIDE BARRIER FREE PARKING SIGNS FOR ALL BARRIER FREE PARKING SPACES. ALL SIGNS TO COMPLY WITH THE MDOT MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.
6. SITE LAYOUT POINTS SHOULD BE ESTABLISHED AND PROTECTED FOR FUTURE SITE WORK.

BARRIER-FREE NOTES

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F	N/A	
G	CONCRETE WALK	2 /C4.0
H	PLAY AREA ENTRANCE RAMP	16 /C4.0
J	N/A	
K	BASKETBALL HOOP POLE (BY OTHERS)	17 /C4.0
L	N/A	
M	N/A	
N	N/A	
P	N/A	

SIGNS		
S1	COMMUNICATION BOARD; PURCHASED BY OWNER, INSTALLED BY SITE CONTRACTOR	SEE SPECS

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Parks & Recreation
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PROJECT TITLE
Wass Elementary School Playground Remodel Bid Package No.01B

Troy School District
Troy, Michigan

DRAWING TITLE
Playground Layout Enlargement Plans

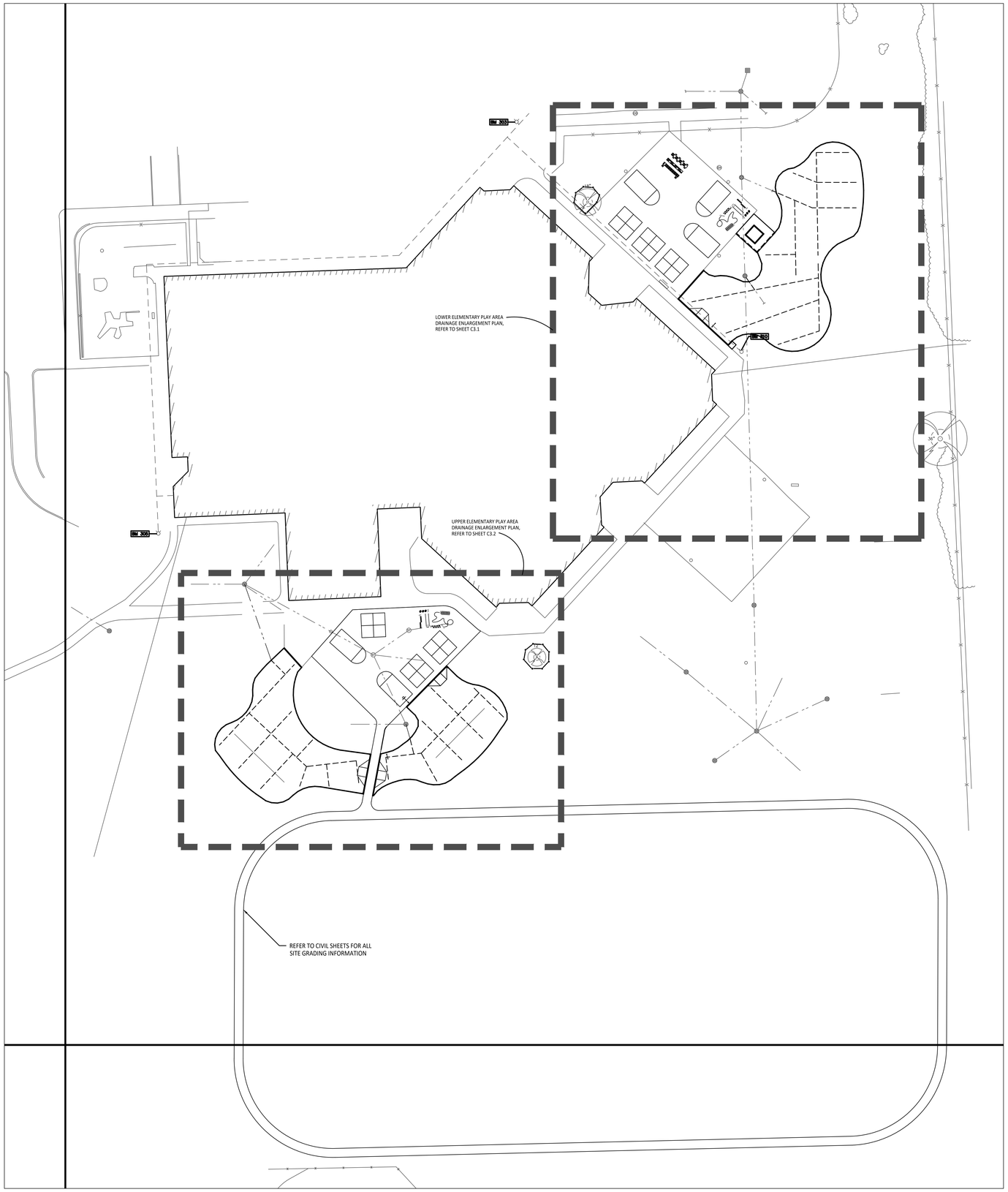
ISSUE DATES

DATE:	ISSUED FOR:
10-03-2024	CONSTRUCTION DOCUMENTS

DRAWN	DID
CHECKED	DID
APPROVED	DID

PROJECT NO.
22096B

DRAWING NO.
C2.2



1 **Overall Playground Grading Plan**
1" = 30'-0"

0 30 60 90
North
SCALE IN FEET

GRADING NOTES:

1. SURVEY OF EXISTING CONDITIONS PROVIDED BY PEA GROUP, 1849 POND RUN, AUBURN HILLS, MICHIGAN, 48326, (248)689-9090.
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7. ALL TOPSOIL AND EXCESS FILL MATERIAL SHALL BE STOCKPILED ON SITE SEPARATELY FOR LATER RE-USE. LOCATE STOCKPILES IN AREAS AS DIRECTED BY CONSTRUCTION MANAGER AND PROTECT FROM EFFECTS OF EROSION.

PROPOSED FEATURES LEGEND:

695	EXISTING CONTOURS
+711.55 SW CONC.	EXISTING SPOT ELEVATIONS
710	PROPOSED CONTOURS
2%	DIRECTION AND PERCENTAGE OF SLOPE
○	NEW STORMWATER STRUCTURE, REFER TO CIVIL PLANS
- - - - - -	PLAYGROUND UNDER DRAIN PIPE, REFER TO DETAIL 14/C4.0
INV	INVERT ELEVATION

IMPORTANT NOTE

GENERAL EARTHWORK NOTE:

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PROJECT TITLE
Wass Elementary School Playground Remodel Bid Package No.01B

Troy School District
Troy, Michigan

DRAWING TITLE
Overall Playground Drainage Plan

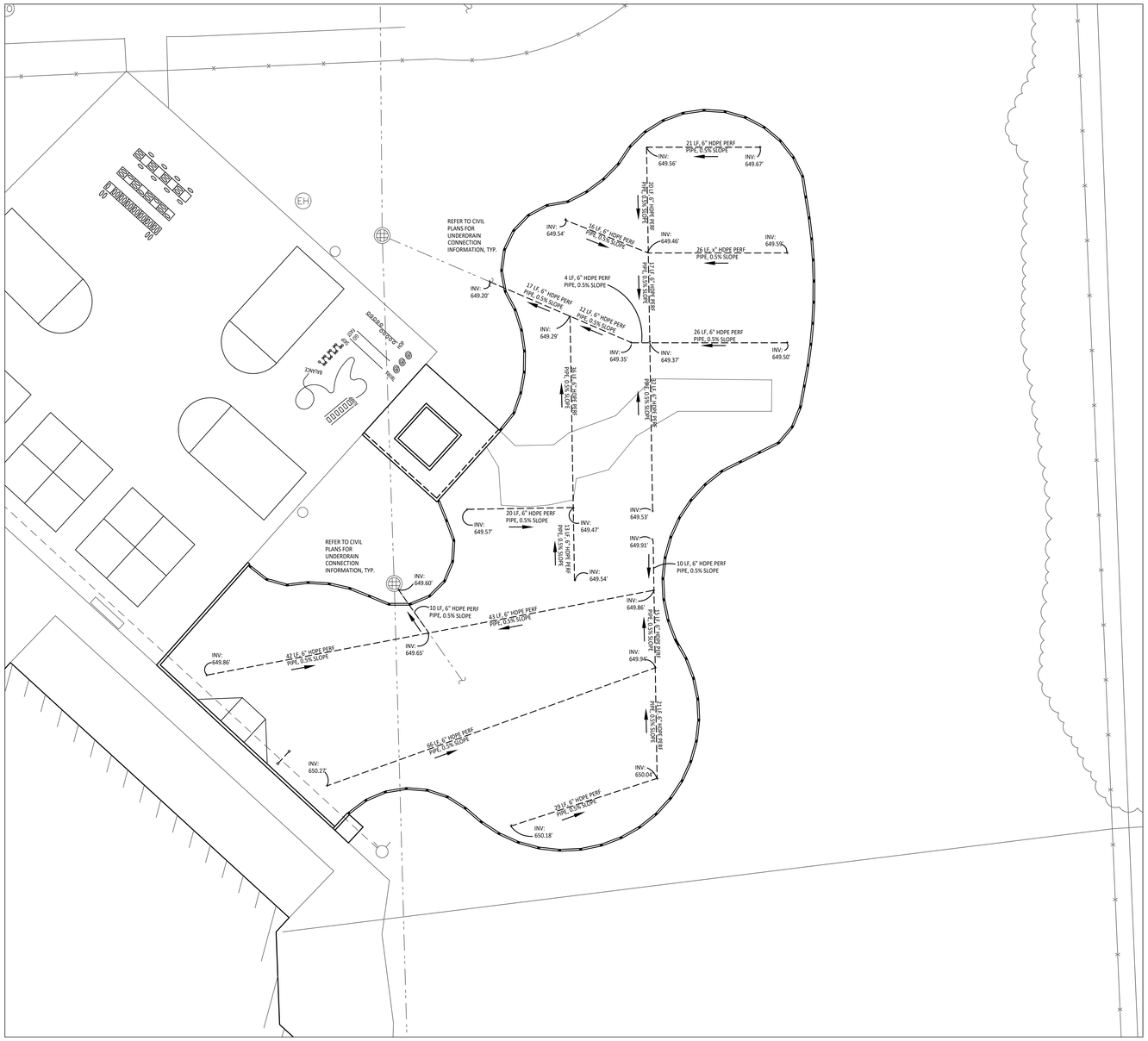
ISSUE DATES

10-03-2024	CONSTRUCTION DOCUMENTS

DATE:	ISSUED FOR:
DRAWN	DID
CHECKED	DID
APPROVED	DID

PROJECT NO.
22096B

DRAWING NO.
C3.0



1 **Playground Drainage Enlargement Plan - Lower Elementary Play Area**
1" = 10'-0"

0 10 20 30
North
SCALE IN FEET

GRADING NOTES:

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PROPOSED FEATURES LEGEND:

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+711.55 2067 CONC.	EXISTING SPOT ELEVATIONS
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- - - - -	PLAYGROUND UNDER DRAIN PIPE, REFER TO DETAIL 14/C4.0
INV	INVERT ELEVATION

IMPORTANT NOTE

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PROJECT TITLE
Wass Elementary School Playground Remodel Bid Package No.01B

Troy School District
Troy, Michigan

DRAWING TITLE
Playground Drainage Enlargement Plan

ISSUE DATES

DATE:	ISSUED FOR:
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DRAWN	DID
CHECKED	DID
APPROVED	DID

PROJECT NO.
22096B

DRAWING NO.
C3.1

1 **Playground Drainage Enlargement Plan - Upper Elementary Play Area**

1" = 10'-0"

GRADING NOTES:

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* SITE CONTRACTOR TO INSTALL UNDERDRAINS AS SHOWN ON CONSTRUCTION DOCUMENTS. SITE CONTRACTOR TO USE LAYOUT SERVICES FROM CADD FILES FOR INSTALLATION TO ENSURE THAT THE UNDERDRAINS ARE INSTALLED IN THE CORRECT LOCATIONS.
* THE PLAYGROUND CONTRACTOR WILL THEN INSTALL THE POSTS AND FOOTINGS FOR ALL EQUIPMENT.
* THE SITE CONTRACTOR WILL THEN INSTALL THE DRAINAGE AGGREGATE, TAKING CARE TO NOT DAMAGE THE POSTS OR POWDERCOATING OF THE PLAY EQUIPMENT. THE SITE CONTRACTOR WILL ALSO INSTALL THE ADDITIONAL ENGINEERED FILL FOR THE RESILIENT SURFACING AREAS. THE SITE CONTRACTOR MUST COORDINATE THE DEPTHS WITH THE PLAYGROUND CONTRACTOR PRIOR TO INSTALLATION AS THE DEPTHS VARY BETWEEN PLAYGROUND CONTRACTORS.
* THE PLAYGROUND CONTRACTOR WILL INSTALL THE GEOTEXTILE FABRIC, PLAYGROUND EQUIPMENT, AND SAFETY SURFACING.

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CONSULTANT

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Kalamazoo Michigan 49007
Phone (269) 381-3357
Fax (269) 381-2944

Landscape Architecture
Urban Planning
Parks & Recreation
Campus & Institutional Planning
Camp Planning & Design

PROJECT TITLE

Wass Elementary School Playground Remodel Bid Package No.01B

Troy School District Troy, Michigan

DRAWING TITLE

Playground Drainage Enlargement Plan

ISSUE DATES

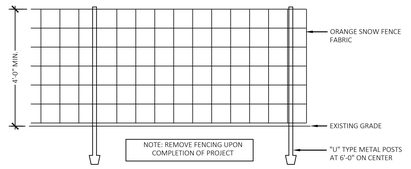
10-03-2024	CONSTRUCTION DOCUMENTS
DATE:	ISSUED FOR:
DRAWN	DID
CHECKED	DID
APPROVED	DID

PROJECT NO.

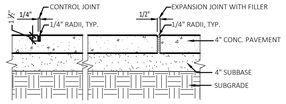
22096B

DRAWING NO.

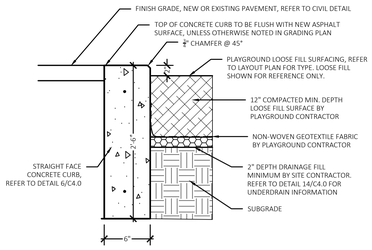
C3.2



1 Tree Protection Fencing Detail
NOT TO SCALE



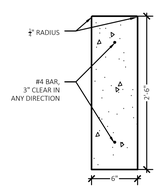
2 Section-Conc. Paving + Jointing
NOT TO SCALE



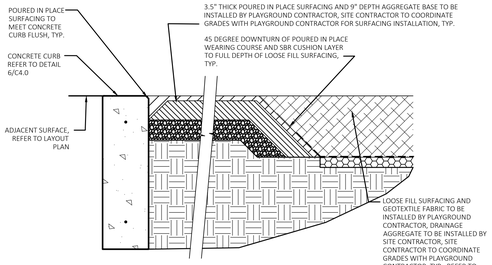
3 New Concrete Curb to Paving Loose Fill Play Surfacing Detail
Not to Scale

4 N/A

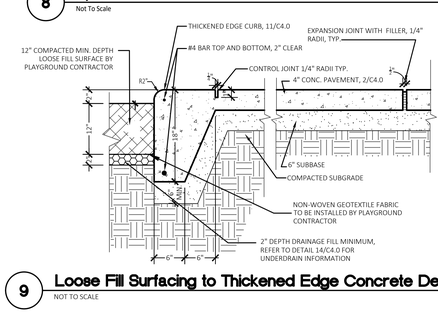
5 N/A



6 Straight Face Concrete Curb Detail
NOT TO SCALE



7 Poured in Place Surfacing Transition to Loose Fill Surfacing and Concrete Curb Detail
NOT TO SCALE



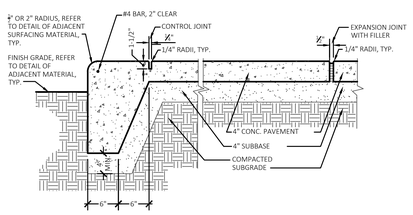
8 N/A
Not To Scale

9 Loose Fill Surfacing to Thickened Edge Concrete Detail
NOT TO SCALE

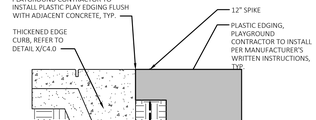
OWNER TO PURCHASE COMMUNICATION SIGN BOARD, SITE CONTRACTOR TO PURCHASE FASTENERS AND POSTS AND INSTALL COMPLETE SIGN, TYP.

REFER TO SPECIFICATIONS FOR FASTENERS AND POST INFORMATION, TYP. INSTALL POSTS WITH 8" DIAMETER CONCRETE FOOTINGS TO FROST DEPTH, TYP.

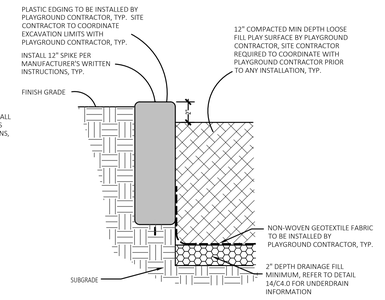
10 Communication Board Detail
Not to Scale



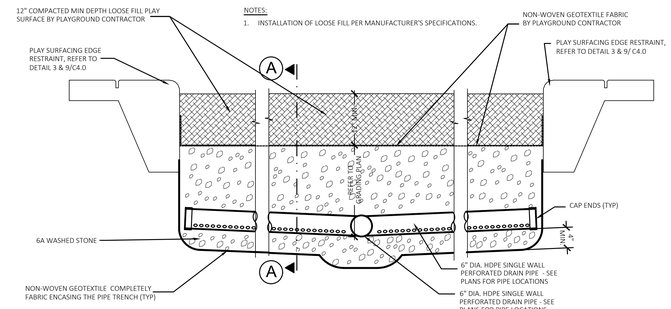
11 Thickened Edge Curb Detail
Not To Scale



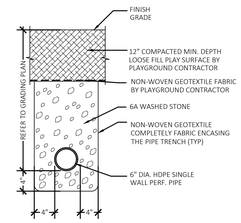
12 Thickened Edge Curb to Plastic Edging Transition Detail
Not to Scale



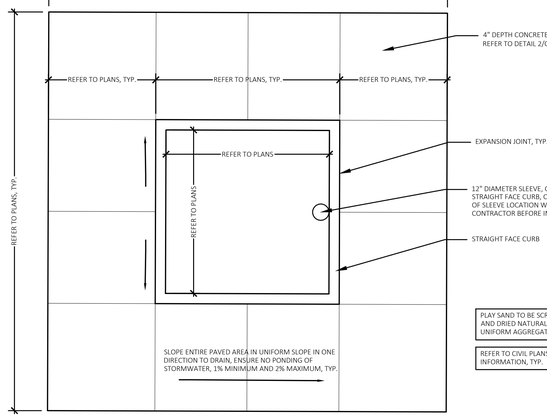
13 Plastic Edging Detail
Not to Scale



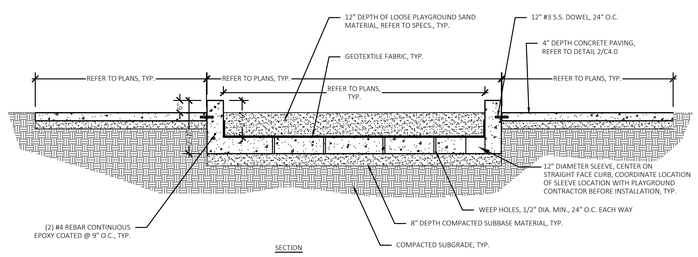
14 Playground Drainage Detail
NOT TO SCALE



SECTION A - A

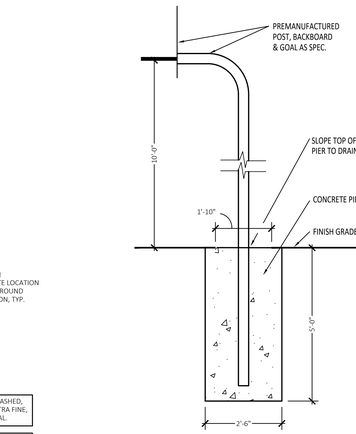


PLAN

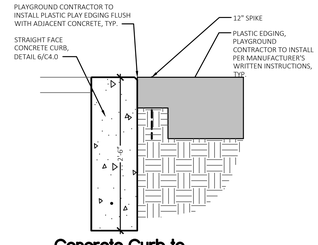


SECTION

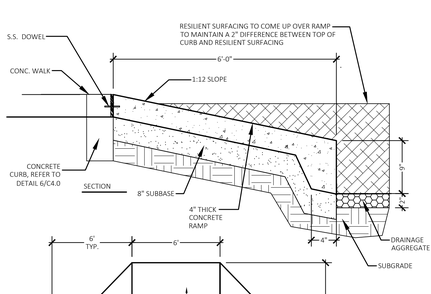
15 Concrete Sand Box Detail
Not to Scale



"For Reference" Basketball Post Footing Detail
Not to Scale



18 Concrete Curb to Plastic Edging Transition Detail
Not to Scale



16 Access Ramp to Play Areas Detail
NOT TO SCALE

TMP ARCHITECTURE

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Landscape Architecture
Urban Planning
Parks & Recreation
Campus & Institutional Planning
Camp Planning & Design

PROJECT TITLE
Wass Elementary School Playground Remodel Bid Package No.01B

Troy School District Troy, Michigan

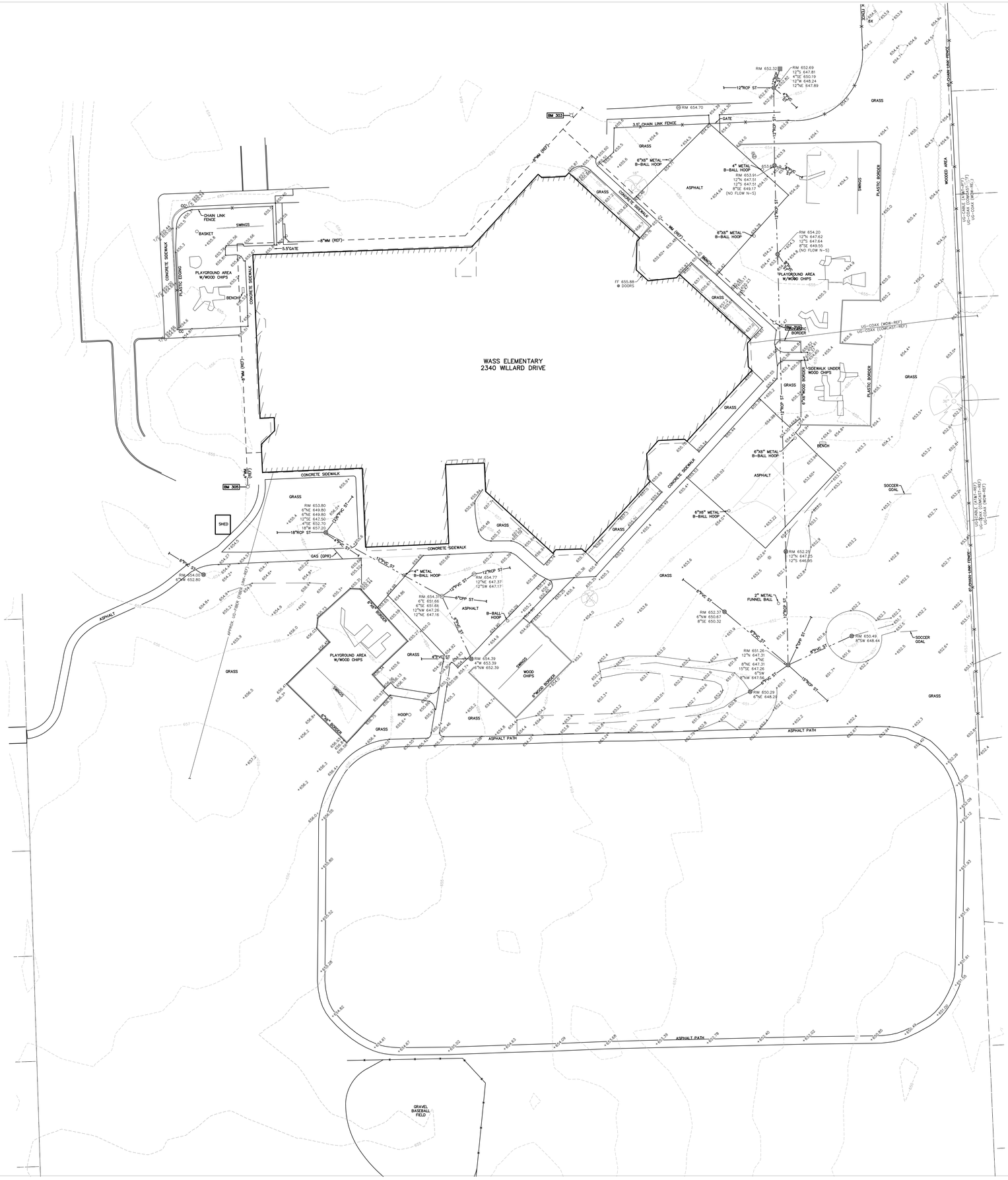
DRAWING TITLE
Details

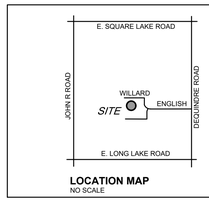
ISSUE DATES

10-03-2024	CONSTRUCTION DOCUMENTS
DATE:	ISSUED FOR:
DRAWN	DID
CHECKED	DID
APPROVED	DID

PROJECT NO.
22096B

DRAWING NO.
C4.0





LOCATION MAP
NO SCALE

NORTH

0 15 30 60
SCALE: 1" = 30'

LEGEND:

- EX. OH, ELEC, POLE & GUY WIRE
- EX. U.G. CABLE TV & PEDESTAL
- EX. U.G. COMMUNICATION LINE, PEDESTAL & MANHOLE
- EX. U.G. ELEC.MANHOLE, METER & HANDHOLE
- EX. GAS LINE
- EX. GAS VALVE & GAS LINE MARKER
- EX. TRANSFORMER & IRRIGATION VALVE
- EX. WATER MAIN
- EX. HYDRANT, GATE VALVE & POST INDICATOR VALVE
- EX. WATER VALVE BOX & SHUTOFF
- EX. SANITARY SEWER
- EX. SANITARY CLEANOUT & MANHOLE
- EX. COMBINED SEWER MANHOLE
- EX. STORM SEWER
- EX. CLEANOUT & MANHOLE
- EX. SQUARE, ROUND, & BEEHIVE CATCH BASIN
- EX. YARD DRAIN & ROOF DRAIN
- EX. UNIDENTIFIED STRUCTURE
- EX. MAILBOX, SIGN & LIGHTPOLE
- EX. FENCE
- EX. GUARD RAIL
- EX. SPOT ELEVATION
- EX. CONTOUR
- EX. WETLAND
- IRON FOUND / SET
- NAIL FOUND / NAIL & CAP SET
- BRASS PLUG SET
- MONUMENT FOUND / SET
- SECTION CORNER FOUND
- R M C — RECORDED / MEASURED / CALCULATED

REFERENCE DRAWINGS:

CABLE	AT&T MAP A1, DATED 03/7/2023 COMCAST CABLE MAP, EMAIL DATED 03/29/2023 WOW CABLE MAP, EMAIL DATED 03/24/2023
FIBER OPTIC	FIBER LINK MAP, EMAIL DATED 03/24/2023
WATER MAIN	GIS MAP, CITY OF TROY EMAIL DATED 03/24/2023

BENCHMARKS:
(OPS DERIVED - NAVD88)

BM #303
DIMPLE ON A HYDRANT LOCATED APPROX./ 43' NORTH OF THE SCHOOL BUILDING NEAR THE BUS DROP OFF.
ELEV. - 657.36

BM #305
DIMPLE ON A HYDRANT LOCATED APPROX. 15' SOUTHWEST FROM THE SOUTHWEST BUILDING CORNER OF THE SCHOOL.
ELEV. - 657.48

BM #310
ARROW ON A HYDRANT LOCATED ON THE EAST SIDE OF THE SCHOOL, APPROX. 21' NORTHEAST FROM THE NORTHEAST BUILDING CORNER.
ELEV. - 657.81

LEGAL DESCRIPTION:

PARCEL ID 20-12-401-002

T2N, R11E, SEC 12 PART OF S 1/2 OF SEC BEG AT PT DIST E 2521.75 FT & N 00-07-48 E 1226.47 FT FROM SW SEC COR, TH N 00-07-48 E 1305.78 FT, TH N 87-49-28 E 705.18 FT, TH S 00-07-43 E 1332.55 FT, TH W 710.62 FT TO BEG EXC THAT PART PLATTED INTO 'HIGHBURY WOODS' 20.14 A

FLOODPLAIN NOTE:
BY GRAPHICAL PLOTTING, SITE IS WITHIN ZONE 'X', AN AREA DETERMINED TO BE OUTSIDE OF THE 0.2% ANNUAL CHANCE FLOODPLAIN, PER FLOOD INSURANCE RATE MAP NUMBER 26125C0534F, DATED SEPTEMBER 29, 2006.

TMP ARCHITECTURE

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REGISTRATION SEAL

CONSULTANT

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PROJECT TITLE
Wass Elementary School
2340 WILLARD DRIVE

Playground Remodel Bid Package No.01B

Troy School District
Troy, Michigan

DRAWING TITLE
Topographic Survey

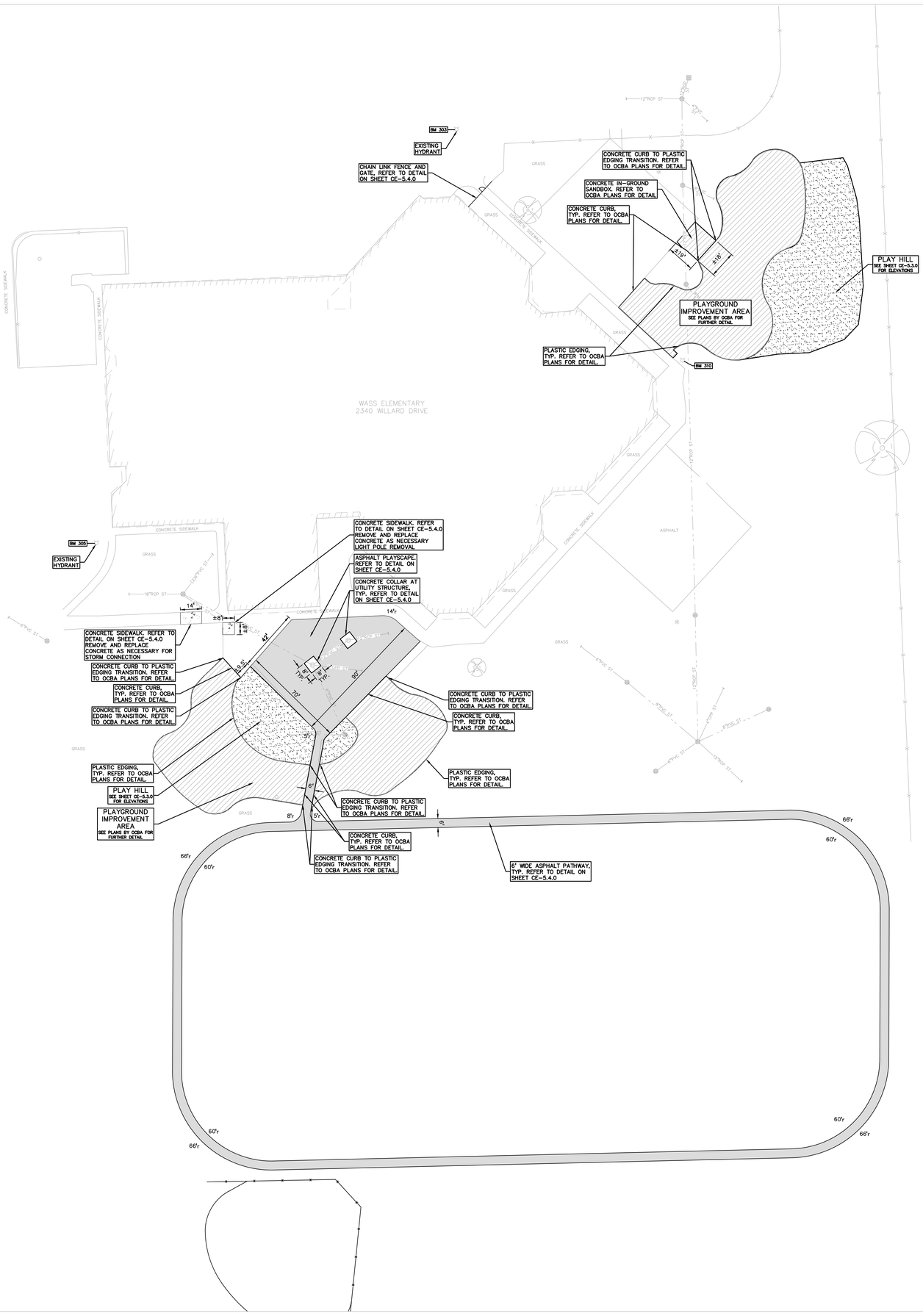
ISSUE DATES

DATE:	ISSUED FOR:
10-03-2024	CONSTRUCTION DOCUMENTS
09-10-2024	OWNER REVIEW
08-21-2024	INTERNAL COORDINATION
07-24-2024	DESIGN DEVELOPMENT

DRAWN	JG
CHECKED	JW
APPROVED	TD

PROJECT NO.
22096B

DRAWING NO.
CE-5.1.0



LEGEND:

- CONCRETE PAVEMENT (STD DUTY, HEAVY DUTY, R.O.W. ONLY)
- ASPHALT PAVEMENT (STD DUTY, SEAL COAT, PLAYSCAPE)
- WETLAND
- CONCRETE CURB AND GUTTER
- REVERSE GUTTER PAN
- SETBACK LINE
- SIGN
- LIGHTPOLE
- FENCE
- GUARD RAIL

NOTES:

1. CONTRACTOR TO VERIFY ALL QUANTITIES SHOWN ON THE PLANS. ANY DEVIATIONS TO THE PLAN QUANTITIES SHALL BE BROUGHT TO THE ATTENTION OF THE SCHOOL DISTRICT AND PEA GROUP, IN WRITING PER THE BID PACKAGE, FOR VERIFICATION PRIOR TO BIDDING.
2. ALL DIMENSIONS SHOWN ARE TO BACK OF CURB, FACE OF SIDEWALK, CENTER OF MANHOLE/CATCH BASIN UNLESS OTHERWISE NOTED.
3. DOWEL INTO EXISTING CURB AND GUTTER 9" WITH EPOXY COATED #4 BAR CONTINUOUS BETWEEN EXISTING AND PROPOSED CURBING.
4. REFER TO NOTES AND DETAILS SHEET FOR PAVING DETAILS.
5. CONTRACTOR TO FIELD VERIFY ALL UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION INCLUDING BUT NOT LIMITED TO: SITE LIGHTING, FIBER LINES, ETC.
6. CONTRACTOR TO REMOVE AND REPLACE SIGNS AND POSTS PER DETAILS ON SHEET C-4.0. ALL SIGNS AND ANY POSTS IN GOOD CONDITION SHALL BE RETURNED TO THE OWNER. ALL POSTS DAMAGED OR OTHERWISE NOT IN USEABLE CONDITION, SHALL BE DISPOSED OF AT NO ADDITIONAL COST TO THE OWNER.
7. FOR THE TWO (2) CATCH BASINS, LOCATED IN THE WORK AREA; BIDDERS ARE TO INCLUDE RECONSTRUCTION OF THESE STRUCTURES (GREATER THAN 12-INCHES IN DEPTH FROM THE RIM ELEVATION OF REPAIR WORK) IN THE BASE BID. THE SUCCESSFUL BIDDER WILL BE PAID FOR REPAIRING EACH STRUCTURE BASED ON THE ACTUAL DEPTH OF REPAIR WITH EITHER STRUCTURAL ADJUSTMENT (WITHIN TOP 12-INCHES OF RIM ELEVATION) OR STRUCTURAL RECONSTRUCTION (GREATER THAN 12-INCHES IN DEPTH) PER THE UNIT PRICES PROVIDED IN THE BID PACKAGE AND THE SCOPE OF WORK DETERMINED AND APPROVED PRIOR TO THE WORK COMMENCING. REPLASTERING OF THE ENTIRE STRUCTURE SHALL BE INCLUDED IN THE UNIT PRICE FOR BOTH STRUCTURAL ADJUSTMENT AND STRUCTURAL RECONSTRUCTION.

SUBGRADE UNDERCUTTING NOTES:

1. TO MINIMIZE SUBGRADE INSTABILITY AND UNDERCUTS, THE SUBGRADE SHALL NOT BE LEFT EXPOSED TO PRECIPITATION AND CONSTRUCTION OPERATIONS AND SHOULD BE PERFORMED DURING THE SUMMER MONTHS TO ENSURE DRY, WARM, WEATHER. ADDITIONALLY, THE SUBGRADE MAY BECOME UNSTABLE UNDER REPEATED LOADING OF CONSTRUCTION TRAFFIC; THEREFORE, CONSTRUCTION EQUIPMENT SHOULD BE LIMITED ON THE EXPOSED SUBGRADE.
2. SUBGRADE UNDERCUT SHALL BE EVALUATED BY A QUALIFIED ENGINEERING TECHNICIAN TO DETERMINE IF SUBGRADE STABILIZATION IS NECESSARY. UNDERCUT EXCAVATIONS SHALL BE BACKFILLED WITH MDOT 21AA DENSE GRADED AGGREGATE PLACED IN AN ENGINEERED MANNER. LIFT THICKNESS SHALL NOT EXCEED 9 INCHES. THE USE OF TRI-AXIAL GEOGRID MAY BE USED TO REDUCE UNDERCUT DEPTHS, AS APPROVED BY THE DISTRICT AND PER THE UNIT PRICE PROVIDED WITH THE CONTRACTORS BID.
3. THE QUANTITY FOR SUBGRADE UNDERCUT FOR EACH SITE SHALL BE INCLUDED IN THE BASE BID. THIS ITEM IS CONSIDERED AN ALLOWANCE AND FINAL PAYMENT WILL BE BASED ON THE ACTUAL VOLUME OF COMPACTED IN PLACE STONE PER THE UNIT PRICE PROVIDED IN THE BID PACKAGE.
4. ALL ENGINEERED FILL SHALL BE COMPACTED TO A DENSITY OF AT LEAST 95 PERCENT OF THE MAXIMUM DENSITY DETERMINED BY THE MODIFIED PROCTOR (ASTM D1557) METHOD OF TESTING. ALL ENGINEERED FILL MATERIAL SHALL BE PLACED AND COMPACTED AT APPROXIMATELY THE OPTIMUM MOUSTURE CONTENT. FROZEN MATERIAL SHALL NOT BE USED AS FILL, NOR SHOULD FILL BE PLACED ON A FROZEN SUBGRADE.
5. SUBGRADE UNDERCUT DRAIN TILE SHALL BE EVALUATED BY A QUALIFIED ENGINEERING TECHNICIAN TO DETERMINE IF SUBGRADE STABILIZATION IS NECESSARY. DRAIN TILE SHALL BE PLACED WITHIN ANY UNDERCUT AREA AND CONNECTED TO THE CLOSEST CATCH BASIN TO PREVENT GROUNDWATER FROM POOLING WITHIN THE GRANULAR SOILS IN UNDERCUTS AND CREATING "BATHTUBS" IN THE COHESIVE SOILS.
6. THE QUANTITY FOR SUBGRADE UNDERCUT DRAIN TILE (4") FOR EACH SITE SHALL BE INCLUDED IN THE BASE BID. THIS ITEM IS CONSIDERED AN ALLOWANCE AND FINAL PAYMENT WILL BE BASED ON THE ACTUAL FOOTAGE OF COMPACTED IN PLACE STONE PER THE UNIT PRICE PROVIDED IN THE BID PACKAGE.

NORTH

0 15 30 60

SCALE: 1" = 30'

TMP ARCHITECTURE

TMP ARCHITECTURE INC

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REGISTRATION SEAL

CONSULTANT

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PROJECT TITLE

Wass Elementary School

2340 WILLARD DRIVE

Playground Remodel Bid Package No.01B

Troy School District
Troy, Michigan

DRAWING TITLE

Dimension & Paving Plan

ISSUE DATES

10-03-2024	CONSTRUCTION DOCUMENTS
09-10-2024	OWNER REVIEW
08-21-2024	INTERNAL COORDINATION
07-24-2024	DESIGN DEVELOPMENT

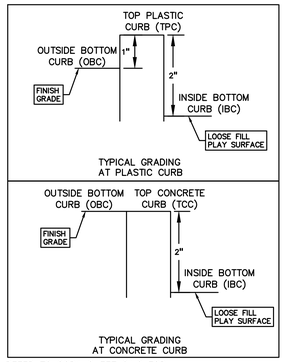
DATE:	ISSUED FOR:
DRAWN	JG
CHECKED	JW
APPROVED	TD

PROJECT NO.

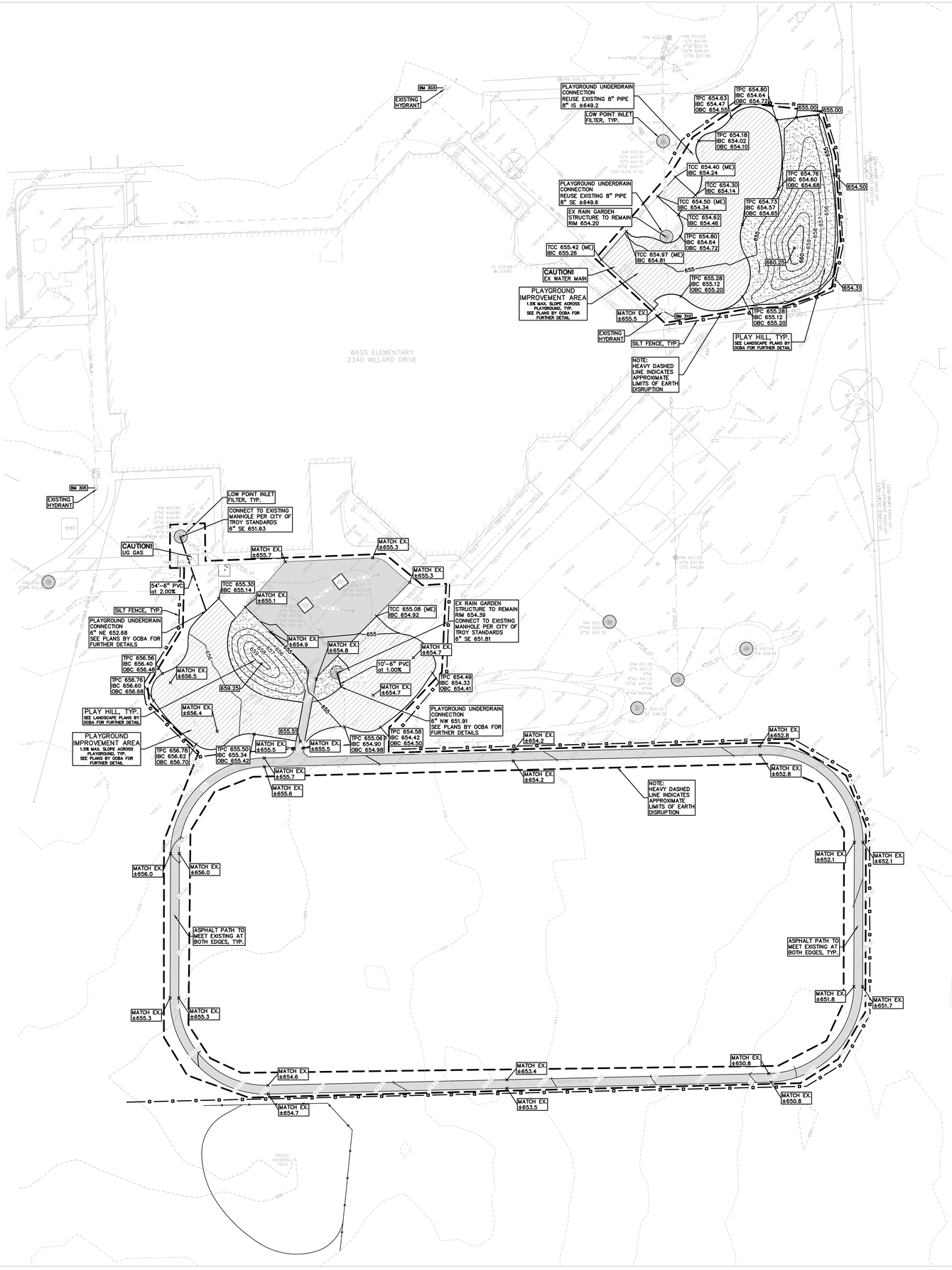
22096B

DRAWING NO.

CE-5.2.0



REFER TO OCBA SHEET C4.0 FOR DETAILS OF CURB SECTIONS



SYMBOLS: EROSION CONTROL:

- (SP-2) SILT FENCE
- (SI-2A) LOW POINT INLET FILTER
- (SI-3) RYCB INLET FILTER
- (E-9) EROSION CONTROL BLANKET
- LAWN RESTORATION
- LIMITS OF DISRUPTION

REFER TO CITY OF TROY SOIL EROSION AND SEDIMENTATION CONTROL DETAILS SHEET FOR ALL DEVICE DETAILS.

NORTH

0 15 30 60

SCALE: 1" = 30'

UTILITY LEGEND:

- EX. OH. ELEC, POLE & GUY WIRE
- EX. U.G. CABLE TV & PEDESTAL
- EX. U.G. COMMUNICATION LINE, PEDESTAL & MANHOLE
- EX. U.G. ELEC.MANHOLE, METER & HANDHOLE
- EX. GAS LINE
- EX. GAS VALVE & GAS LINE MARKER
- EX. TRANSFORMER & IRRIGATION VALVE
- EX. WATER MAIN
- EX. HYDRANT, GATE VALVE & POST INDICATOR VALVE
- EX. WATER VALVE BOX & SHUTOFF
- EX. SANITARY SEWER
- EX. SANITARY CLEANOUT & MANHOLE
- EX. COMBINED SEWER MANHOLE
- EX. STORM SEWER
- EX. CLEANOUT & MANHOLE
- EX. SQUARE, ROUND, & BEEHIVE CATCH BASIN
- EX. YARD DRAIN & ROOF DRAIN
- EX. UNIDENTIFIED STRUCTURE
- PROPOSED WATER MAIN
- PROPOSED HYDRANT AND GATE VALVE
- PROPOSED TAPPING SLEEVE, VALVE & WELL
- PROPOSED POST INDICATOR VALVE
- PROPOSED SANITARY SEWER
- PROPOSED SANITARY CLEANOUT & MANHOLE
- PROPOSED STORM SEWER
- PROPOSED STORM SEWER CLEANOUT & MANHOLE
- PROPOSED CATCH BASIN, INLET & YARD DRAIN

EARTHWORK BALANCING NOTE:

THE CONTRACTOR SHALL BE RESPONSIBLE FOR IMPORTING OR EXPORTING ALL MATERIALS AS REQUIRED TO PROPERLY GRADE THIS PROJECT TO THE FINISHED ELEVATIONS SHOWN ON THE APPROVED PLANS. THE CONTRACTOR SHALL MAKE THEIR OWN DETERMINATION OF CUT AND FILL QUANTITIES AND ALLOW FOR REMOVAL OF EXCESS OR IMPORTATION OF ADDITIONAL MATERIAL AT NO ADDITIONAL COST TO THE OWNER.

GRADING LEGEND:

- 655.51 — EXISTING SPOT ELEVATION
- 622.50 — PROPOSED SPOT ELEVATION: TYPICALLY TOP OF PAVEMENT IN PAVED AREAS, GUTTER GRADE IN CURB LINES.
- 670 — EXISTING CONTOUR
- 922 — PROPOSED CONTOUR
- PROPOSED REVERSE GUTTER PAN
- PROPOSED RIDGE LINE
- PROPOSED SWALE/DITCH

ABBREVIATIONS

T/C = TOP OF CURB
T/P = TOP OF PAVEMENT
T/S = TOP OF SIDEWALK
T/W = TOP OF WALL
TCC = TOP OF CONCRETE CURB
TPC = TOP OF PLASTIC CURB
IBC = INSIDE OF BOTTOM OF CURB
OBC = OUTSIDE BOTTOM OF CURB
G = GUTTER GRADE
F.G. = FINISH GRADE
RIM = RIM ELEVATION
B/W = BOTTOM OF WALL

REFER TO GRADING NOTES ON SHEET CE-5.4.0

NOTE:
CONTRACTOR TO VERIFY ALL QUANTITIES. ANY DEVIATIONS OF THE PLAN QUANTITIES SHALL BE BROUGHT TO THE ATTENTION OF PEA GROUP FOR VERIFICATION PRIOR TO BIDDING.

STORM SEWER QUANTITIES:

6" PVC	64 LF
CONNECT TO EXISTING MANHOLE	2 EA.

EROSION CONTROL QUANTITIES:

SILT FENCE	1,796 LF
INLET FILTERS	9 EA.

SOIL EROSION MAINTENANCE SCHEDULE AND NOTES:

1. THE SOIL EROSION CONTROLS WILL BE MAINTAINED WEEKLY AND AFTER EVERY STORM EVENT BY:

   ROB CARSON
   TROY SCHOOL DISTRICT
   1140 RANKIN
   TROY, OAKLAND COUNTY, MICHIGAN
   248-823-4067

2. IF ANY DAMAGE HAS OCCURRED AS A RESULT OF STORM WATER DISCHARGE FROM THE SITE, THE FOLLOWING STEPS SHALL BE IMPLEMENTED.
3. ANY DEBRIS OR DIRT ON ANY PAVED AREA RESULTING FROM CONSTRUCTION TRAFFIC SHALL BE CLEANED IN A PROMPT MANNER BY THE CONTRACTOR. THE CONSTRUCTION DRIVE SHALL BE CLEANED AT THE END OF EACH DAY.
4. ALL DIRT AND MUD TRACKED ONTO PAVED AREAS SHALL BE REMOVED BY THE CONTRACTOR DAILY BY SCRAPING. STREET SWEEPING IS REQUIRED WEEKLY.
5. SILT FENCE MAINTENANCE SHALL INCLUDE THE REMOVAL OF ANY BUILT UP SEDIMENT WHEN THE SEDIMENT HEIGHT ACCUMULATES TO 1/3 TO 1/2 OF THE HEIGHT OF THE FENCE. THE CONTRACTOR IS RESPONSIBLE TO REMOVE, REPLACE, RETRENCH OR REBACKFILL THE SILTATION FENCE SHOULD IT FALL OR BE DAMAGED DURING CONSTRUCTION.
6. INLET FILTER MAINTENANCE SHALL INCLUDE THE REMOVAL OF ANY ACCUMULATED SILT OR OTHER DEBRIS. THE REMOVAL OF SILT SHOULD BE WITH THE USE OF A STIFF BRISTLE BROOM OR SQUARE POINT SHOVEL. IF INLET FILTERS CAN NOT BE CLEANED OR ARE DAMAGED, THEN THE FABRIC MUST BE REPLACED.
7. CONTRACTOR TO PROVIDE WATER TRUCK TO WATER DOWN THE SITE ON A DAILY BASIS AS REQUIRED TO MAINTAIN DUST CONTROL.
8. IF HIGH GROUNDWATER IS ANTICIPATED OR ENCOUNTERED DURING CONSTRUCTION A DEWATERING PLAN MUST BE SUBMITTED TO THE CITY ENGINEERING DIVISION FOR REVIEW.

SOIL EROSION AND SEDIMENTATION CONTROL SEQUENCE OF CONSTRUCTION

1. SEE OAKLAND COUNTY W.R.C. SOIL EROSION AND SEDIMENTATION CONTROL DETAILS SHEET FOR ALL SOIL EROSION CONTROL RELATED DETAILS.
2. PLACE SILT FENCE & INSTALL INLET FILTERS ON EXISTING STORM SEWER STRUCTURES, ACCORDING TO PLANS.
3. INSTALL TEMPORARY CRUSHED CONCRETE ACCESS DRIVE AT ALL CONSTRUCTION ENTRANCES. (80'x24'x8" W/MINIMUM OF 1"-3" CRUSHED CONCRETE – NO FINES).
4. REMOVE CURB, PAVEMENT, TREES, ETC. AS DIRECTED ON THE DEMOLITION PLAN.
5. STRIP AND STOCKPILE TOPSOIL FOR RESTORATION REQUIREMENTS.
6. DISPOSE OF ALL EXCESS, UNSUITABLE MATERIALS OFF SITE IN A LEGAL MANNER. NO BURN OR BURY PITS ALLOWED.
7. UNSUITABLE MATERIALS CONSIST OF, BUT ARE NOT NECESSARILY LIMITED TO THE FOLLOWING: CONCRETE, ASPHALT, TREES, BRUSH, STUMPS, ROOTS, OR OTHER MISCELLANEOUS DEBRIS OR TRASH.
8. MASS GRADE THE SITE IN ACCORDANCE WITH THE PLANS.
9. INSTALL HYDROSEED AS SHOWN ON THE PLAN WITHIN 5 DAYS OF COMPLETION OF MASS GRADING OR WHENEVER DISTURBED AREAS WILL REMAIN UNCHANGED FOR 30 DAYS OR GREATER. MINIMUM 3"-4" TOPSOIL WILL BE USED WHERE VEGETATION IS REQUIRED.
10. COMPLETE ROUGH GRADING OF SITE. PLACE INLET FILTERS AT ALL INLETS AND CATCH BASINS, AS SHOWN.
11. FINISH GRADE AND PAVE SITE AS PROPOSED TO DRAIN TO STORM SEWER SYSTEM. REPAIR INLET FILTERS AS REQUIRED.
12. APPLY TOPSOIL, HYDROSEED TO ALL DISTURBED AREAS UPON COMPLETION OF GRADING. THE CONTRACTOR SHALL STAGE CONSTRUCTION ACTIVITIES IN ORDER TO MINIMIZE THE EXPOSURE OF UNSTABILIZED AREAS.
13. CLEAN PAVEMENT AND STORM SEWERS. REMOVE SILT FENCE AND TREE PROTECTION FENCE, AND INLET FILTERS ONCE VEGETATION HAS BEEN ESTABLISHED.
14. ALL DIRT AND MUD TRACKED ONTO PUBLIC ROADS SHALL BE REMOVED DAILY.
15. STREET CATCH BASINS TO BE PERIODICALLY CLEANED AND FILTER CLOTH CHANGED AND MAINTAINED.

BENCHMARKS:
(GPS DERIVED - NAVD88)

BM #303
DIMPLE ON A HYDRANT LOCATED APPROX/ 43' NORTH OF THE SCHOOL BUILDING NEAR THE BUS DROP OFF.
ELEV. - 657.36

BM #305
DIMPLE ON A HYDRANT LOCATED APPROX. 15' SOUTHWEST FROM THE SOUTHWEST BUILDING CORNER OF THE SCHOOL.
ELEV. - 657.48

BM #310
ARROW ON A HYDRANT LOCATED ON THE EAST SIDE OF THE SCHOOL, APPROX. 21' NORTHEAST FROM THE NORTHEAST BUILDING CORNER.
ELEV. - 657.81

NOTE:

1. PER THE 'SOIL EROSION AND SEDIMENTATION CONTROL SEQUENCE OF CONSTRUCTION' NOTES THE SUCCESSFUL BIDDER TO THE CLEAN THE STORM SEWER. THIS CLEANING SHALL INCLUDE CLEANING OUT THE STRUCTURES AND ENTIRE SEWER RUNS BETWEEN STRUCTURES USING HYDRAULICALLY PROPELLED, HIGH-VELOCITY JET, OR MECHANICALLY POWERED EQUIPMENT. SELECTION OF THE EQUIPMENT USED SHALL BE BASED ON THE CONDITIONS OF LINES AT THE TIME THE WORK COMMENCES. THE EQUIPMENT AND METHODS SELECTED SHALL BE SATISFACTORY TO THE SCHOOL DISTRICT'S REPRESENTATIVE. THE EQUIPMENT SHALL BE CAPABLE OF REMOVING DIRT, GREASE, ROCKS, SAND, AND OTHER MATERIALS AND OBSTRUCTIONS FROM THE SEWER LINES AND MANHOLES. IF CLEANING OF AN ENTIRE SECTION CANNOT BE SUCCESSFULLY PERFORMED FROM ONE MANHOLE, THE EQUIPMENT SHALL BE SET UP ON THE OTHER MANHOLE AND CLEANING AGAIN ATTEMPTED. IF, AGAIN, SUCCESSFUL CLEANING CANNOT BE PERFORMED OR THE EQUIPMENT FAILS TO TRAVERSE THE ENTIRE MANHOLE SECTION, IT WILL BE ASSUMED THAT A MAJOR BLOCKAGE EXISTS AND THE CLEANING EFFORT SHALL BE ABANDONED.
2. PER THE PROJECT SPECIFICATIONS; PRIOR TO THE PLACEMENT OF TOPSOIL THE SUCCESSFUL BIDDER TO SCHEDULE AN INSPECTION BY THE SCHOOL DISTRICT OR PEA GROUP TO CONFIRM THAT THE GRADE IS AT THE PROPER ELEVATION WHERE THE MINIMUM DEPTH OF TOPSOIL CAN BE PLACED THROUGHOUT THE AREA.
3. CONTRACTOR TO FIELD VERIFY ALL UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION INCLUDING BUT NOT LIMITED TO: SITE LIGHTING, FIBER LINES, ETC.

GENERAL SITE CONDITIONS:

1. ACCORDING TO THE USDA NRCS WEB SOIL SURVEY, THE SITE CONSISTS OF THE FOLLOWING SOIL TYPES:

   12 BROOKSTON AND COLWOOD LOAMS
   52A SELFRIDGE LOAMY SAND, 0 TO 3 PERCENT SLOPES
   53A TEDROW LOAMY SAND, 0 TO 3 PERCENT SLOPES
   63A URBAN LAND–THETFORD COMPLEX, 0 TO 3 PERCENT SLOPES
   145A BLOUNT LOAM, ERIE–HURON LAKE PLAIN, 0–2 PERCENT SLOPES

2. TOTAL DISTURBED AREA = ±1.41 ACRES

SEQUENCE OF CONSTRUCTION:

START DAY	END DAY	
1	2	INSTALL TEMPORARY SOIL EROSION CONTROL MEASURES, SILT FENCES, INLET PROTECTION, ETC. AS NECESSARY.
1	90	MAINTAIN A 25' BUFFER OF VEGETATION AROUND PERIMETER OF SITE WHERE POSSIBLE.
1	5	STRIP AND STOCKPILE TOPSOIL AS REQUIRED RESTORATION. ALL STOCKPILES MUST BE GRADED AND SEEDED.
5	15	REMOVE ALL PAVEMENT, CURB, UTILITIES, ETC. AS REQUIRED TO INSTALL THE PROPOSED WORK AS SHOWN ON THE TOPOGRAPHIC SURVEY AND DEMOLITION PLAN.
10	15	DISPOSE OF ALL EXCESS/UNSUITABLE MATERIALS OFF SITE IN A LEGAL MANNER. NO ON-SITE BURN OR BURY PITS ALLOWED.
30	40	ROUGH GRADE SITE. SEED AND MULCH BLANKETS MUST BE INSTALLED AS SHOWN WITHIN 5 DAYS OF FINAL GRADE. REPAIR AND/OR RE-INSTALL ANY TEMPORARY SOIL EROSION CONTROL MEASURES THAT WERE DAMAGED DURING GRADING OPERATIONS.
15	90	TEMPORARY SEEDING MUST BE PROVIDED IN AREAS NOT TO BE WORKED ON FOR 15 DAYS OR LONGER.
40	50	FINE GRADE SITE AND PREPARE FOR SITE PAVING OPERATIONS.
50	80	INSTALL ALL PAVEMENT, SIDEWALKS, CURBING AS PROPOSED. IF PERMANENT LANDSCAPING IS NOT TO BE INSTALLED SOON AFTER PAVING IS COMPLETE, ALL AREAS WITHIN 20 FEET OF BACK OF CURB MUST BE TEMPORARILY SEEDED. REPAIR INLET PROTECTION, SILT FENCE AND ANY OTHER DAMAGED SOIL EROSION CONTROL MEASURES AS NECESSARY.
80	89	FINAL GRADE, REDISTRIBUTE STOCKPILED TOPSOIL, ESTABLISH VEGETATION AND INSTALL ALL PERMANENT LANDSCAPING IN ALL DISTURBED AREAS NOT BUILT.
88	90	CLEAN PAVEMENT AND REMOVE ALL TEMPORARY SOIL EROSION CONTROL MEASURES. RE-ESTABLISH VEGETATION AS REQUIRED.
90	90	REMOVE SEDIMENTATION CONTROLS ONCE ENTIRE SITE HAS BEEN PERMANENTLY STABILIZED.

TMP ARCHITECTURE

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REGISTRATION SEAL

CONSULTANT

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PROJECT TITLE

Wass Elementary School

2340 WILLARD DRIVE

Playground Remodel Bid Package No.01B

Troy School District
Troy, Michigan

DRAWING TITLE

Grading, Utility & Soil Erosion Control Plan

ISSUE DATES

10-03-2024	CONSTRUCTION DOCUMENTS
09-10-2024	OWNER REVIEW
08-21-2024	INTERNAL COORDINATION
07-24-2024	DESIGN DEVELOPMENT
DATE:	ISSUED FOR:
DRAWN	JG
CHECKED	JW
APPROVED	TD

PROJECT NO.
22096B

DRAWING NO.
CE-5.3.0

GENERAL NOTES:

THESE NOTES APPLY TO ALL CONSTRUCTION ACTIVITIES ON THIS PROJECT.

1. ALL CONSTRUCTION, WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH CURRENT OSHA, MDOT AND MUNICIPALITY STANDARDS AND REGULATIONS.
2. THE CONTRACTOR SHALL NOTIFY THE CITY OF TROY ENGINEER AND/OR THE AUTHORITY HAVING JURISDICTION 3 BUSINESS DAYS PRIOR TO THE BEGINNING OF CONSTRUCTION.
3. THE CONTRACTOR MUST CONTACT THE ENGINEER SHOULD THEY ENCOUNTER ANY DESIGN ISSUES DURING CONSTRUCTION. IF THE CONTRACTOR MAKES DESIGN MODIFICATIONS WITHOUT THE WRITTEN DIRECTION OF THE DESIGN ENGINEER, THE CONTRACTOR DOES SO AT HIS OWN RISK.
4. ALL NECESSARY PERMITS, TESTING, BONDS AND INSURANCES ETC., SHALL BE PAID FOR BY THE CONTRACTOR. THE OWNER SHALL PAY FOR ALL CITY INSPECTION FEES.
5. THE CONTRACTOR SHALL NOTIFY THE APPROPRIATE 811/ONE CALL UTILITY LOCATING CENTER, THE CITY ENGINEER AND/OR THE AUTHORITY HAVING JURISDICTION 3 BUSINESS DAYS PRIOR TO THE BEGINNING OF CONSTRUCTION. IF NO NOTIFICATION IS GIVEN AND DAMAGE RESULTS, SAID DAMAGE WILL BE REPAIRED AT SOLE EXPENSE OF THE CONTRACTOR. IF EXISTING UTILITY LINES ARE ENCOUNTERED THAT CONFLICT IN LOCATION WITH NEW CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE DESIGN ENGINEER SO THAT THE CONFLICT MAY BE RESOLVED.
6. CONTRACTOR TO VERIFY THAT THE PLANS AND SPECIFICATIONS ARE THE VERY LATEST PLANS AND SPECIFICATIONS AND FURTHERMORE, VERIFY THAT THESE PLANS AND SPECIFICATIONS HAVE BEEN APPROVED. ALL ITEMS CONSTRUCTED BY THE CONTRACTOR PRIOR TO RECEIVING FINAL APPROVAL, HAVING TO BE ADJUSTED OR RE-DONE, SHALL BE AT THE CONTRACTORS EXPENSE. SHOULD THE CONTRACTOR ENCOUNTER A CONFLICT BETWEEN THESE PLANS AND/OR SPECIFICATIONS, THEY SHALL SEEK CLARIFICATION IN WRITING FROM THE ENGINEER BEFORE COMMENCEMENT OF CONSTRUCTION. FAILURE TO DO SO SHALL BE AT SOLE EXPENSE TO THE CONTRACTOR.
7. ANY WORK WITHIN THE STREET OR HIGHWAY RIGHTS-OF-WAY SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF THE AGENCIES HAVING JURISDICTION AND SHALL NOT BEGIN UNTIL ALL NECESSARY PERMITS HAVE BEEN ISSUED FOR THE WORK.
8. ALL PROPERTIES OR FACILITIES IN THE SURROUNDING AREAS, PUBLIC OR PRIVATE, DESTROYED OR OTHERWISE DISTURBED DUE TO CONSTRUCTION, SHALL BE REPLACED AND/OR RESTORED TO THE ORIGINAL CONDITION BY THE CONTRACTOR.
9. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY BARRICADING, SIGNAGE, LIGHTS AND TRAFFIC CONTROL DEVICES TO PROTECT THE WORK AND SAFELY MAINTAIN TRAFFIC IN ACCORDANCE WITH LOCAL REQUIREMENTS AND THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (LATEST EDITION). THE DESIGN ENGINEER, OWNER, CITY OF TROY AND STATE SHALL NOT BE HELD LIABLE FOR ANY CLAIMS RESULTING FROM ACCIDENTS OR DAMAGES CAUSED BY THE CONTRACTOR'S FAILURE TO COMPLY WITH TRAFFIC AND PUBLIC SAFETY REGULATIONS DURING THE CONSTRUCTION PERIOD.
10. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ADJUST THE TOP OF ALL EXISTING AND PROPOSED STRUCTURES (MANHOLES, CATCH BASINS, INLETS, GATE WELLS ETC.) WITHIN GRADED AND /OR PAVED AREAS TO FINAL GRADE SHOWN ON THE PLANS. ALL SUCH ADJUSTMENTS SHALL BE INCIDENTAL TO THE JOB AND WILL NOT BE PAID FOR SEPARATELY.

PAVING NOTES:

1. IN AREAS WHERE NEW PAVEMENTS ARE BEING CONSTRUCTED, THE TOPSOIL AND SOIL CONTAINING ORGANIC MATTER SHALL BE REMOVED PRIOR TO PAVEMENT CONSTRUCTION.
2. REFER TO ARCHITECTURAL PLANS FOR DETAILS OF FROST SLAB AT EXTERIOR BUILDING DOORS.
3. CONSTRUCTION TRAFFIC SHOULD BE MINIMIZED ON THE NEW PAVEMENT. IF CONSTRUCTION TRAFFIC IS ANTICIPATED ON THE PAVEMENT STRUCTURE, THE INITIAL LIFT THICKNESS COULD BE INCREASED AND PLACEMENT OF THE FINAL LIFT COULD BE DELAYED UNTIL THE MAJORITY OF THE CONSTRUCTION ACTIVITIES HAVE BEEN COMPLETED. THIS ACTION WILL ALLOW REPAIR OF LOCALIZED FAILURE, IF ANY DOES OCCUR, AS WELL AS REDUCE LOAD DAMAGE ON THE PAVEMENT SYSTEM.
4. ALL EXPANSION JOINTS AND CONCRETE PAVEMENT JOINTS TO BE SEALED.
5. CONCRETE PAVEMENT JOINTING – UNLESS SHOWN OTHERWISE IN THE PLANS OR REQUIRED BY THE AUTHORITY HAVING JURISDICTION;
   - 5.1. WHERE PROPOSED CONCRETE ABUTS A STRUCTURE, PROVIDE A MINIMUM 1/2" EXPANSION JOINT. THE JOINT FILLER BOARD MUST BE AT LEAST THE FULL DEPTH OF THE CONCRETE AND HELD DOWN A 1/2" TO ALLOW FOR SEALING.
   - 5.2. WHERE PROPOSED CONCRETE ABUTS EXISTING CONCRETE OR IN BETWEEN POURS OF PROPOSED CONCRETE (CONSTRUCTION JOINT), PROVIDE 5/8" DOWELS EVERY 30" CENTER TO CENTER HALF WAY ALONG THE THICKNESS OF THE PROPOSED PAVEMENT. ALTERNATE DOWELS SIZES AND SPACING MUST BE APPROVED BY THE ENGINEER PRIOR TO COMMENCING WORK AND VIA THE SUBMITTAL PROCESS.
   - 5.3. WHERE PROPOSED CONCRETE ABUTS PROPOSED SIDEWALK OR CURBING, PROVIDE A MINIMUM 1/2" EXPANSION JOINT.
   - 5.4. CONTROL, LONGITUDINAL AND/OR TRANSVERSE JOINTS SHALL BE PLACED TO PROVIDE PANELS WITHIN THE PAVEMENT AS SQUARE AS POSSIBLE WITH THE FOLLOWING MAXIMUM SPACING PARAMETERS:
     - 5.4.1. 6-INCH THICK CONCRETE PAVEMENT: 12' X 12'
     - 5.4.2. 8-INCH THICK CONCRETE PAVEMENT: 15' X 15'
   - 5.5. IRREGULAR-SHAPED PANELS MAY REQUIRE THE USE OF REINFORCING MESH OR FIBER MESH AS DETERMINED BY THE ENGINEER. THE USE OF MESH MUST BE APPROVED THE ENGINEER PRIOR TO COMMENCING WORK AND VIA THE SUBMITTAL PROCESS.
   - 5.6. IF A JOINT PLAN IS NOT PROVIDED IN THE PLANS, THE CONTRACTOR SHALL SUBMIT ONE TO THE ENGINEER FOR REVIEW PRIOR TO COMMENCING WORK AND VIA THE SUBMITTAL PROCESS.
6. CONCRETE CURBING JOINTING – UNLESS SHOWN OTHERWISE IN THE PLANS OR REQUIRED BY THE AUTHORITY HAVING JURISDICTION
   - 6.1. JOINTS WHEN ADJACENT TO ASPHALT PAVEMENT
     - 6.1.1. PLACE CONTRACTION JOINTS AT 10' INTERVALS
     - 6.1.2. PLACE 1/2" EXPANSION JOINT AT CATCH BASINS, EXISTING AND PROPOSED SIDEWALK OR EXISTING CURBING.
     - 6.1.3. PLACE 1" EXPANSION JOINT:
       - 6.1.3.1. AT SPRING POINTS OF INTERSECTIONS OR ONE OF THE END OF RADIUS LOCATIONS IN A CURVE
       - 6.1.3.2. AT 400' MAXIMUM INTERVALS ON STRAIGHT RUNS
       - 6.1.3.3. AT THE END OF RADIUS AT OPPOSITE ENDS IN A CURBED LANDSCAPE ISLAND
   - 6.2. JOINTS WHEN TIED TO CONCRETE PAVEMENT
     - 6.2.1. PLACE CONTRACTION JOINTS OPPOSITE ALL TRANSVERSE CONTRACTION JOINTS IN PAVEMENT
     - 6.2.2. PLACE 1/2" EXPANSION JOINT AT CATCH BASINS, EXISTING AND PROPOSED SIDEWALK OR EXISTING CURBING.
     - 6.2.3. PLACE 1"EXPANSION JOINT OPPOSITE ALL TRANSVERSE EXPANSION JOINTS IN PAVEMENT
     - 6.2.4. CURB AND GUTTER AND CONCRETE SHALL BE TIED TOGETHER SIMILAR TO A LONGITUDINAL LANE TIE JOINT (MDOT B1 JOINT)
   - 6.3. IN BETWEEN POURS OF PROPOSED CONCRETE CURBING (CONSTRUCTION JOINT):
     - 6.3.1. CARRY THE REBAR CONTINUOUSLY BETWEEN POURS
     - 6.3.2. IF THE REBAR IS NOT LONG ENOUGH TO CARRY CONTINUOUSLY, THEN TIE TWO PIECES OF REBAR PER THE LATEST MDOT SPECIFICATIONS
7. CONCRETE SIDEWALK JOINTING – UNLESS SHOWN OTHERWISE IN THE PLANS OR REQUIRED BY THE AUTHORITY HAVING JURISDICTION
   - 7.1. PLACE TRANSVERSE CONTRACTION JOINTS EQUAL TO THE WIDTH OF THE WALK WHEN WIDTH IS LESS THAN 8'
   - 7.2. PLACE TRANSVERSE AND LONGITUDINAL CONTRACTION JOINTS EQUAL TO 1/2 THE WIDTH OF THE WALK WHEN WIDTH IS EQUAL TO OR GREATER THAN 8'
   - 7.3. PLACE 1" EXPANSION JOINT WHERE ABUTTING SIDEWALK RAMP AND/OR RADIUS IN INTERSECTION
   - 7.4. PLACE TRANSVERSE 1/2" EXPANSION JOINT AT MAXIMUM OF 100' SPACING
   - 7.5. PLACE 1/2" EXPANSION JOINT WHEN ABUTTING A FIXED STRUCTURE, OTHER PAVEMENT (CONCRETE PAVEMENT AND DRIVE APPROACHES), UTILITY STRUCTURES, LIGHT POLE BASES AND COLUMNS.
   - 7.6. WHEN ALONG A CURVE, JOINTS MUST BE PERPENDICULAR TO THE CURVE WITH A MINIMUM LENGTH OF 1 FOOT BEFORE INTERSECTING ANOTHER JOINT(S) IN ANY DIRECTION. NO JOINTS ARE ALLOWED TO BE CUT AT AN ANGLE OTHER THAN 90° AT THE CURBLINE

GENERAL GRADING AND EARTHWORK NOTES:

THESE NOTES APPLY TO ALL CONSTRUCTION ACTIVITIES ON THIS PROJECT

1. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING TREES AND BRUSH AND REMOVE ALL THAT ARE NECESSARY TO GRADE SITE.
2. ALL GRADES ARE TO TOP OF PAVEMENT UNLESS OTHERWISE NOTED.
3. THE STAGING OF CONSTRUCTION ACTIVITIES SHALL OCCUR ONLY WITHIN THE SITE BOUNDARIES. ANY CONSTRUCTION ACTIVITIES OUTSIDE OF THE WORK AREA BOUNDARIES SHALL BE AT THE SOLE RESPONSIBILITY AND RISK OF THE CONTRACTOR.
4. ALL SOIL EROSION AND SEDIMENTATION CONTROL MEASURES IS SHALL MEET THE REQUIREMENTS OF THE AUTHORIZED PUBLIC AGENCY OF JURISDICTION.
5. ALL EARTHWORK AND GRADING OPERATIONS SHALL BE PERFORMED IN ACCORDANCE WITH THE PLANS AND SPECIFIACTIONS.
6. REFER TO SOIL EROSION CONTROL PLAN FOR ADDITIONAL SOIL EROSION AND SEDIMENTATION CONTROL MEASURES AND NOTES.
7. ALL LANDSCAPING IS TO BE COMPLETED BY STALLANTIS.
8. THE CONTRACTOR SHALL NOTE EXISTING UNDERGROUND UTILITIES WITHIN AND ADJACENT TO THE SITE. BACKFILL FOR EXISTING UTILITY TRENCHES SHALL BE EXAMINED CRITICALLY. ANY TRENCHES FOUND TO HAVE SOFT, UNSTABLE OR UNSUITABLE BACKFILL MATERIAL IN THE OPINION OF THE THIRD PARTY TESTING COMPANY, THAT ARE TO BE WITHIN THE ZONE OF INFLUENCE OF PROPOSED BUILDINGS OR PAVEMENT SHALL BE COMPLETELY EXCAVATED AND BACKFILLED WITH SUITABLE MATERIAL.
9. ON-SITE FILL CAN BE USED IF THE SPECIFIED COMPACTION REQUIREMENTS CAN BE ACHIEVED. IF ON-SITE SOIL IS USED, IT SHOULD BE CLEAN AND FREE OF FROZEN SOIL, ORGANICS, OR OTHER DELETERIOUS MATERIALS.
10. THE FINAL SUBGRADE/EXISTING AGGREGATE BASE SHOULD BE THOROUGHLY PROOFROLLED USING A FULLY LOADED TANDEM AXLE TRUCK OR FRONT END LOADER UNDER THE OBSERVATION OF A GEOTECHNICAL/PAVEMENT ENGINEER. LOOSE OR YIELDING AREAS THAT CANNOT BE MECHANICALLY STABILIZED SHOULD BE REINFORCED USING GEOGRIDS OR REMOVED AND REPLACED WITH ENGINEERED FILL OR AS DICTATED BY FIELD CONDITIONS.
11. THE REMOVAL OF EXISTING SOIL TO GET TO FINAL SUBGRADE ELEVATION SHALL NOT BE CONSIDERED SUBGRADE UNDERCUTTING. IT IS PART OF THE EARTHWORKS TO BALANCE THE SITE AND ESTABLISH THE ELEVATIONS FOR THE PLACEMENT OF THE PROPOSED PAVEMENT ELEVATIONS. THIS SHALL NOT BE PAID FOR SEPARATELY, BUT INCLUDED IN THE EARTHWORKS FOR THE PROJECT.
12. SUBGRADE UNDERCUTTING, INCLUDING BACKFILLING SHALL BE PERFORMED TO REPLACE MATERIALS DISCOVERED TO BE FROST HEAVING AND UNSTABLE SOIL CONDITIONS. ANY EXCAVATIONS THAT MAY BE REQUIRED BELOW THE TOPSOIL IN FILL AREAS OR BELOW SUBGRADE IN CUT AREAS WILL BE CLASSIFIED AS SUBGRADE UNDERCUTTING.
13. SUBGRADE UNDERCUTTING SHALL BE PERFORMED WHERE NECESSARY AND THE EXCAVATED MATERIAL SHALL BECOME THE PROPERTY OF THE CONTRACTOR. ANY SUBGRADE UNDERCUTTING SHALL BE BACKFILLED AS RECOMMENDED IN THE GEOTECHNICAL ENGINEERING REPORT FOR THE PROJECT.
14. ANY SUB-GRADE WATERING REQUIRED TO ACHIEVE REQUIRED DENSITY SHALL BE CONSIDERED INCIDENTAL TO THE JOB.

CONSTRUCTION MATERIAL SUBMITTALS

UNLESS REQUIRED OTHERWISE IN THE PROJECT SPECIFICATIONS, THE CONTRACTOR SHALL ONLY SUBMIT THE FOLLOWING CONSTRUCTION MATERIAL SUBMITTALS, AS APPLICABLE TO THE PLANS, FOR REVIEW BY THE ENGINEER. UNLESS APPROVED IN ADVANCE AND IN WRITING BY THE ENGINEER, ANY MATERIAL SUBMITTALS PROVIDED TO THE ENGINEER FOR REVIEW IN ADDITION TO THIS LIST SHALL BE RETURNED TO THE CONTRACTOR WITHOUT A REVIEW BEING PERFORMED.

1. SOIL EROSION AND SEDIMENTATION CONTROL MEASURES
2. UTILITY TRENCH BACKFILL MATERIAL WITH ALL MATERIAL DATA INCLUDED IN THE SUBMITTAL BEING DATED WITHIN 60 DAYS OF THE SUBMITTAL UNLESS APPROVED OTHERWISE BY THE ENGINEER
3. STORM SEWER STRUCTURES
4. STORM SEWER STRUCTURE FRAME AND COVERS INCLUDING CLEAN OUTS
5. PAVEMENT AGGREGATE BASE MATERIAL WITH ALL MATERIAL DATA INCLUDED IN THE SUBMITTAL BEING DATED WITHIN 60 DAYS OF THE SUBMITTAL UNLESS APPROVED OTHERWISE BY THE ENGINEER
6. PAVEMENT UNDERDRAIN MATERIAL AND BACKFILL WITH ALL BACKFILL MATERIAL DATA INCLUDED IN THE SUBMITTAL BEING DATED WITHIN 60 DAYS OF THE SUBMITTAL UNLESS APPROVED OTHERWISE BY THE ENGINEER
7. PAVEMENT MIX DESIGNS SUBMITTED FOR REVIEW BY THE ENGINEER MUST FOLLOW THE CURRENT MDOT REVIEW CHECKLISTS AS SUMMARIZED BELOW AND ALL MATERIAL DATA INCLUDED IN THE SUBMITTAL BEING DATED WITHIN 60 DAYS OF THE SUBMITTAL UNLESS APPROVED OTHERWISE BY THE ENGINEER:
   - •8.1. CONCRETE MIX DESIGN REVIEW CHECKLIST (FORM 2000)
   - •8.2. SUPERPAVE MIX DESIGN CHECKLIST (FORM 1862)
   - •8.3. MARSHALL MIX DESIGN CHECKLIST (FORM 1849)
8. SITE FENCING AND GATES
9. ANY ITEMS SHOWN IN THE PLANS OR DETAIL SHEETS THAT SPECIFICALLY STATE FOR THE CONTRACTOR TO SUBMIT A SHOP DRAWING TO THE ENGINEER FOR REVIEW. THESE ITEMS INCLUDE, BUT ARE NOT LIMITED TO:

** ANY SPECIALITY ITEMS SHOWN IN THE PLANS OR DETAIL SHEETS THAT SPECIFICALLY DO NOT STATE FOR THE CONTRACTOR SHALL SUBMIT A SHOP DRAWING TO THE ENGINEER FOR REVIEW BUT THE CONTRACTOR REQUESTS TO BE REVIEWED. THE CONTRACTOR'S REQUEST FOR REVIEW MUST BE IN WRITING AND APPROVED BY THE ENGINEER PRIOR TO SUBMITTING THE INFORMATION.

GENERAL UTILITY NOTES:

1. ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS OF THE CITY OF TROY.
2. ALL TRENCHES UNDER OR WITHIN THREE (3) FEET OR THE FORTY-FIVE (45) DEGREE ZONE OF INFLUENCE LINE OF EXISTING AND/OR PROPOSED PAVEMENT, BUILDING PAD OR DRIVE APPROACH SHALL BE BACKFILLED WITH SAND COMPACTED TO AT LEAST NINETY-FIVE (95) PERCENT OF MAXIMUM UNIT WEIGHT (ASTM D-1557). ALL OTHER TRENCHES TO BE COMPACTED TO 90% OR BETTER.
3. WHERE EXISTING MANHOLES OR SEWER PIPE ARE TO BE TAPPED, DRILL HOLES 4" CENTER TO CENTER, AROUND PERIPHERY OF OPENING TO CREATE A PLANE OF WEAKNESS JOINT BEFORE BREAKING SECTION OUT.
4. THE LOCATIONS AND DIMENSIONS SHOWN ON THE PLANS FOR EXISTING UTILITIES ARE IN ACCORDANCE WITH AVAILABLE INFORMATION WITHOUT UNCOVERING AND MEASURING. THE DESIGN ENGINEER DOES NOT GUARANTEE THE ACCURACY OF THIS INFORMATION OR THAT ALL EXISTING UNDERGROUND FACILITIES ARE SHOWN. CONTRACTOR SHALL FIELD VERIFY UTILITIES.
5. THE CONTRACTOR SHALL COORDINATE TO ENSURE ALL REQUIRED PIPES, CONDUITS, CABLES AND SLEEVES ARE PROPERLY PLACED FOR THE INSTALLATION OF GAS, ELECTRIC, PHONE, CABLE, IRRIGATION, ETC. IN SUCH A MANNER THAT WILL FACILITATE THEIR PROPER INSTALLATION PRIOR TO THE PLACEMENT OF THE PROPOSED PAVEMENT AND LANDSCAPING.
6. PIPE LENGTHS INDICATED ARE FROM CENTER OF STRUCTURE AND TO END OF SECTION UNLESS NOTED OTHERWISE.
7. CONTRACTOR SHALL INSPECT ALL EXISTING PUBLIC STORM SEWER, SANITARY SEWER AND WATER MAIN STRUCTURES WITHIN THE LIMITS OF CONSTRUCTION AND WITH THE GOVERNING AGENCY INSPECTOR PRIOR TO ESTABLISHING FINAL GRADE. NOTIFY THE ENGINEER, OWNER/DEVELOPER, AND GOVERNING AGENCY IF STRUCTURE IS DEEMED TO BE STRUCTURALLY UNSOUND AND/OR IN NEED OF REPAIR.

STORM SEWER NOTES:

1. ALL STORM SEWER LEADS SHALL BE CONSTRUCTED AT 1.00% MINIMUM SLOPE.
2. ALL STORM SEWER 10" OR LESS AND/OR LEADS SHALL BE SDR 26.
3. JOINTS FOR P.V.C. PIPE SHALL BE ELASTOMERIC (RUBBER GASKET) AS SPECIFIED IN A.S.T.M. DESIGNATION D-3212.

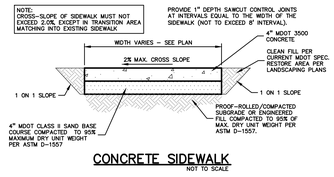
GENERAL BARRIER FREE NOTES:

THE FOLLOWING NOTES PROVIDE AN OUTLINE OF SOME OF THE REQUIREMENTS CONTAINED WITHIN THE "STANDARDS FOR ACCESSIBLE DESIGN – AMERICANS WITH DISABILITIES ACT 2010", AND "ACCESSIBLE AND USEABLE BUILDINGS AND FACILITIES", ICC/ANSI A117.1–2009. CONTRACTOR IS RESPONSIBLE FOR ALL OF THE REQUIREMENTS PRESENTED WITHIN THESE DOCUMENTS, WHICH ARE AVAILABLE IN FULL UPON REQUEST.

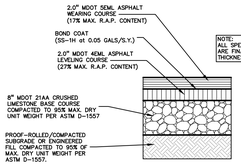
1. AN ACCESSIBLE ROUTE CONSISTS OF WALK SURFACES, CURB RAMPS AND RAMPS, AT LEAST ONE ACCESSIBLE ROUTE SHALL BE PROVIDED WITHIN THE SITE FROM ACCESSIBLE PARKING SPACES, ACCESSIBLE PASSENGER LOADING ZONES, PUBLIC STREETS AND SIDEWALKS, AND PUBLIC TRANSPORTATION STOPS TO THE BUILDING OR FACILITY ENTRANCE THEY SERVE.
2. THE RUNNING SLOPE OF ALL WALKING SURFACES SHALL NOT EXCEED 5% (1:20) AND THE CROSS-SLOPE SHALL NOT EXCEED 2% (1:48).
3. WALKING SURFACES MUST BE LEVEL WITH PERMITTED VERTICAL CHANGES IN LEVEL NOT TO EXCEED 1/4", OR BEVELED CHANGES IN LEVEL NOT TO EXCEED 1/2". REFER TO DETAIL DET-8 THIS SHEET. ANY CHANGE IN LEVEL GREATER THAN 1/2" MUST BE RAMPED.
4. TURNING SPACES ALONG ACCESSIBLE ROUTES MUST BE AT LEAST 5 FEET WIDE IN ALL DIRECTIONS AND NOT EXCEED 2% SLOPE (1:48) IN ANY DIRECTION.
5. ACCESSIBLE ROUTES WILL BE DESIGNED TO BE A MINIMUM OF 5 FEET WIDE. THE MINIMUM CLEAR WIDTH IS 3 FEET.
6. RAMPS ALONG ACCESSIBLE ROUTES WILL HAVE A RUNNING SLOPE GREATER THAN 5% (1:20) AND LESS THAN 8.3% (1:12).
7. THE CROSS-SLOPE OF RAMP RUNS SHALL NOT EXCEED 2% (1:48)
8. THE MINIMUM CLEAR WIDTH OF ANY RAMP IS 36 INCHES.
9. THE MAXIMUM RISE FOR ANY RAMP (NOT INCLUDING CURB RAMPS) SHALL NOT EXCEED 30 INCHES. LANDINGS ARE REQUIRED AT THE TOP AND BOTTOM OF EACH RAMP. LANDINGS SHALL HAVE A CROSS-SLOPE NOT EXCEEDING 2% (1:48), SHALL BE 5 FEET LONG AND AT LEAST AS WIDE AS THE RAMP CLEAR WIDTH. IF THERE IS A CHANGE OF DIRECTION AT A LANDING, THEN THE LANDING MUST BE AT LEAST 5 FEET WIDE AND 5 FEET LONG.
10. CURB RAMPS ALONG ACCESSIBLE ROUTES SHALL NOT RISE MORE THAN 6 INCHES, NOR BE STEEPER THAN 8.3% (1:12). APPROACHING SLOPES TO THE RAMP CANNOT EXCEED 5%, WHICH INCLUDES SIDEWALKS, PAVEMENT, GUTTERS ETC.
11. IF CURB RAMP SIDES ARE FLARED, THE FLARES SHALL NOT BE STEEPER THAN 10% (1:10).
12. LANDINGS ARE REQUIRED AT THE TOP OF ALL CURB RAMPS. THE CLEAR LENGTH OF THE LANDING SHALL BE A MINIMUM OF 36" AND WILL BE AS WIDE AS THE CURB RAMP.
13. CURB RAMPS SHALL BE LOCATED OR PROTECTED TO PREVENT THEIR OBSTRUCTION BY PARKED VEHICLES.
14. HANDRAILS ARE NOT REQUIRED ON CURB RAMPS.
15. WHERE DETECTABLE WARNING IS REQUIRED AT CURB RAMPS, THE DETECTABLE WARNING SHALL BE 24" MINIMUM IN DEPTH AND SHALL EXTEND THE FULL WIDTH OF THE RAMP. THE DETECTABLE WARNING SHALL BE LOCATED SO THE EDGE NEAREST THE CURB IS 6 INCHES MINIMUM AND 8 INCHES MAXIMUM FROM THE CURB LINE.
16. ACCESSIBLE PARKING SPACES ON SITE SHALL BE PROVIDED AS REQUIRED IN SECTION 502 OF THE A.D.A. IF THE SITE HAS MORE THAN ONE PARKING *FACILITY*, EACH *FACILITY* IS REQUIRED TO MEET THESE REQUIREMENTS SEPARATELY. THE REQUIRED NUMBER OF SPACES SHALL BE BASED ON THE TOTAL NUMBER OF PARKING SPACES IN EACH PARKING FACILITY ON SITE.
17. FOR EVERY SIX OR FRACTION OF SIX ACCESSIBLE PARKING SPACES, ONE VAN ACCESSIBLE SPACE SHALL BE PROVIDED.
18. ACCESSIBLE PARKING SPACES SHALL BE LOCATED ON THE SHORTEST ACCESSIBLE ROUTE FROM PARKING TO A BUILDING ENTRANCE. IF THERE IS MORE THAN ONE ACCESSIBLE ENTRANCE, PARKING SHALL BE DISPERSED ALONG THE SHORTEST ACCESSIBLE ROUTE TO THE ACCESSIBLE ENTRANCES.
19. BARRIER FREE CAR PARKING SPACES SHALL BE A MINIMUM OF 8 FEET WIDE WITH AN ACCESS AISLE 5 FEET WIDE MINIMUM. VAN ACCESSIBLE PARKING SPACES SHALL BE AT LEAST 11 FEET WIDE WITH A 5' WIDE ACCESS AISLE. VAN ACCESSIBLE SPACES ARE ALSO ACCEPTABLE WITH AN 8 FOOT WIDTH AND 8 FOOT WIDE ACCESS AISLE. THE ACCESS AISLE IN ALL CASES MUST EXTEND THE FULL LENGTH OF THE PARKING SPACE.
20. SURFACE SLOPES WITHIN THE PARKING SPACES AND AISLES SHALL NOT EXCEED 2% (1:48)
21. ACCESSIBLE AREAS INCLUDING PARKING SPACES, AISLES AND PATHWAYS, REQUIRE A MINIMUM VERTICAL CLEARANCE OF 98 INCHES.
22. ACCESSIBLE PARKING SPACES ARE REQUIRED TO BE IDENTIFIED BY SIGNS. THE SIGNS SHALL INCLUDE THE INTERNATIONAL SYMBOL OF ACCESSIBILITY. VAN PARKING SPACES ARE REQUIRED TO BE DESIGNATED AS "VAN ACCESSIBLE". REFER TO DETAILS ON THIS SHEET.

NOTE: CROSS-SLOPE OF SIDEWALK MUST NOT EXCEED 2.0%, EXCEPT IN TRANSITION AREA MATCHING INTO EXISTING SIDEWALK

PROVIDE 1" DEPTH SAWCUT CONTROL JOINTS AT INTERVALS EQUAL TO THE WIDTH OF THE SIDEWALK (NOT TO EXCEED 8' INTERVAL).



CONCRETE SIDEWALK
NOT TO SCALE



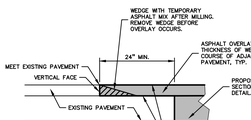
STANDARD DUTY ASPHALT DETAIL
(NOT FOR USE IN THE RIGHT-OF-WAY)
NOT TO SCALE

ASPHALT MIX DESIGN CHART

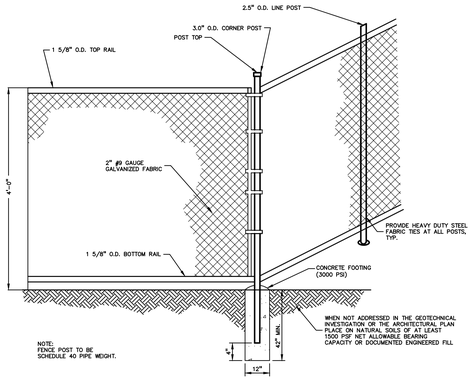
COMMERCIAL ADT 0–300	COMMERCIAL ADT 301–1000	COMMERCIAL ADT 1001–3400	COMMERCIAL ADT 3401	APPLICATION RATE LB/YD² MINIMUM – MAXIMUM
4EL	4EML	4EMH	4EMH	220–275
5EL	5EML	5EMH	SMA OR 5EMH	165–220
PG 58-28	PG 64-28	PG 64-28	PG 70-28P	

AGGREGATE BASE NOTE:
THIS PAVEMENT SECTION DESIGN ASSUMES THE USE OF MDOT 21AA CRUSHED LIMESTONE BASE MATERIAL THAT MEETS THE REQUIREMENTS OF MDOT STANDARD SPECIFICATION SECTION 902 FOR AGGREGATES. IF CRUSHED CONCRETE AGGREGATE BASE IS PROPOSED IN LIEU OF THE SPECIFIED CRUSHED LIMESTONE MATERIAL, PEA GROUP WILL REQUIRE A MINIMUM 25% INCREASE IN BASE THICKNESS. HOWEVER, IF TESTING DOCUMENTATION IS PROVIDED TO PEA GROUP THAT SHOWS THAT THE CRUSHED CONCRETE MATERIAL MEETS ALL REQUIREMENTS OF MDOT SPECIFICATION SECTION 902, THEN THE 25% INCREASE IN THICKNESS MAY BE REEVALUATED.

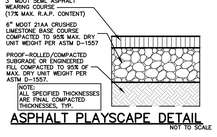
ASPHALT MATERIAL NOTES:
HOT-MIX ASPHALT MIXTURES UTILIZING RECYCLED ASPHALT PAVEMENT (RAP) MUST MEET MDOT SPECIAL PROVISION 122SP0(3E). THE BINDER GRADE FOR THIS WORK IS PG58-22. IF ASPHALT MIXES CONTAINING RAP ARE TO BE SUPPLIED FOR THIS PROJECT, THE ASPHALT BINDER MUST BE REVISED PER MDOT TIER 1 OR TIER 2 REQUIREMENTS (RAP CONTENT UP TO 27% MAXIMUM). TIER 3 MIXES ARE NOT ACCEPTABLE ON THIS PROJECT. AN ASPHALT MIX DESIGN FOR ALL SPECIFIED MIXES SHOULD BE FORWARDED TO PEA GROUP FOR REVIEW PRIOR TO CONSTRUCTION



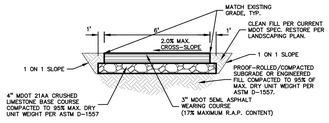
BUTT JOINT DETAIL
NOT TO SCALE

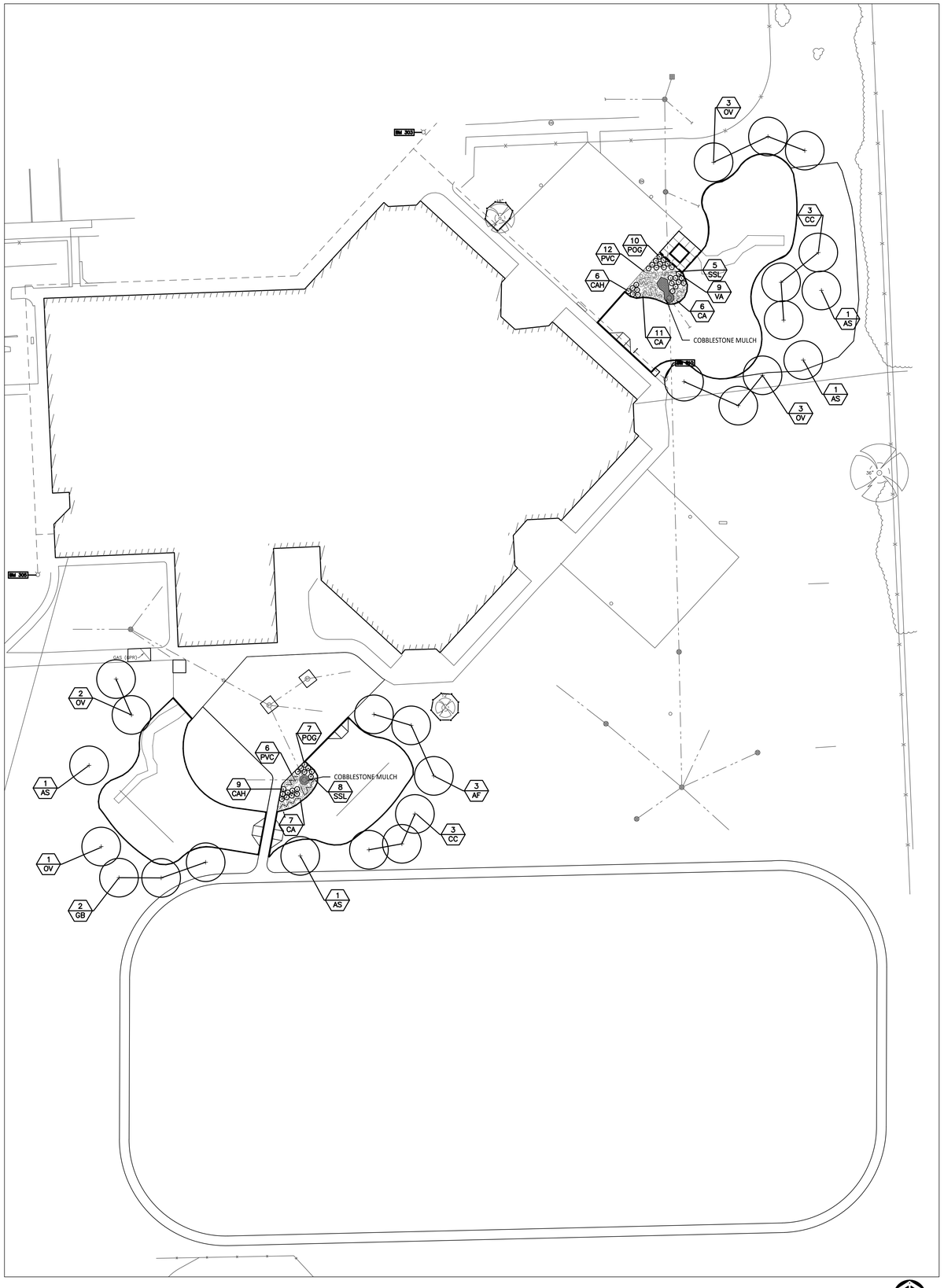


4 FT HIGH CHAIN LINK FENCE DETAIL
NOT TO SCALE



ASPHALT PLAYSCAPE DETAIL
NOT TO SCALE


MATCH EXISTING GRADE, TYP.
1"
6"
1"
2.0% MAX. CROSS-SLOPE
CLEAN FILL PER CURRENT MDOT SPEC. RESTORE PER LANDSCAPING PLAN.
1 ON 1 SLOPE
1 ON 1 SLOPE
PROOF-ROLLED/COMPACTED SUBGRADE OR ENGINEERED FILL COMPACT



1 Site Landscape Plan

1" = 30'-0"

0 30 60 90

North

SCALE IN FEET

PROPOSED FEATURES LEGEND:

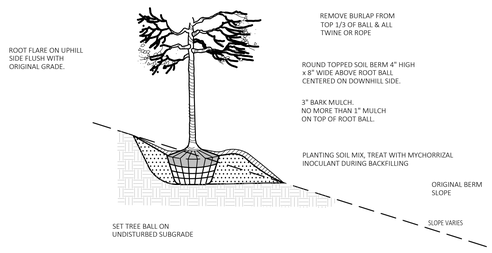
SYMBOL	DESCRIPTION	DETAIL
+	DECIDUOUS TREE	2 & 5/L1.0
	SHRUB	3/L1.0
	GRASSES	6/L1.0
	STONE MULCH	4/L1.0
6 Bn	PLANT TAG- REFERS TO TYPE AND NUMBER OF PLANTINGS TO BE PROVIDED AND MAINTAINED BY CONTRACTOR.	

LANDSCAPE NOTES:

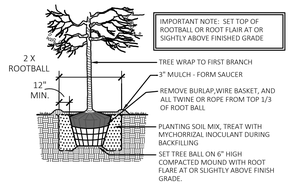
1. SURVEY OF EXISTING CONDITIONS PROVIDED BY PEA GROUP, 1849 POND RUN, AUBURN HILLS, MICHIGAN, 48326, (248)689-9090.
2. CALL "MISS DIG" AND VERIFY ALL UNDERGROUND UTILITIES PRIOR TO BEGINNING WORK. 72 HOURS BEFORE YOU DIG CALL "MISS DIG" AT 1-800-482-7171. ANY UTILITIES DISTURBED BY CONSTRUCTION SHALL BE REPAIRED AT CONTRACTOR'S EXPENSE.
3. ANY DISCREPANCIES BETWEEN THESE PLANS AND ACTUAL FIELD CONDITIONS SHOULD BE REPORTED TO THE CONSTRUCTION MANAGER IMMEDIATELY FOR RESOLUTION.
4. IN AREAS OF NEW TURF PLACE 4" MINIMUM TOPSOIL, FINE GRADE & ESTABLISH TURF WITHIN SEED LIMIT LINES.
5. PLACE SHREDDED HARDWOOD MULCH TO A 3" DEPTH IN ALL TREE & SHRUB BEDS & TO A 2" DEPTH IN ALL GROUND COVER BEDS.
6. UNLESS OTHERWISE NOTED, TOPSOIL, FINE GRADE AND SEED ALL DISTURBED AREAS WITHIN THE SEEDING LIMIT SHOWN AND AREAS DISTURBED BY CONSTRUCTION.
7. REPAIR AND RESTORE ANY DAMAGE OUTSIDE OF LIMIT OF WORK LINE TO ORIGINAL CONDITION.
8. PROTECT ALL TREES AND EXISTING FEATURES TO REMAIN AS SPECIFIED.
9. ALL TOPSOIL AND EXCESS FILL MATERIAL SHALL BE STOCKPILED ON SITE SEPARATELY FOR LATER RE-USE. LOCATE STOCKPILES IN AREAS AS DIRECTED BY CONSTRUCTION MANAGER AND PROTECT FROM EFFECTS OF EROSION.
10. ALL NURSERY STOCK SHALL BE TRUE TO TYPE AND NAME. ALL STOCK SHALL BE FIRST CLASS QUALITY WITH WELL DEVELOPED BRANCH SYSTEMS AND VIGOROUS HEALTHY ROOT SYSTEMS. ALL STOCK SHALL BE WELL FORMED AND THE TRUNKS OF TREES SHALL BE UNIFORM AND STRAIGHT.
11. CONTRACTOR RESPONSIBLE TO LOCATE SITE LIGHTING SERVICES. CONTRACTOR RESPONSIBLE TO NOTIFY CONSTRUCTION MANAGER IF DAMAGE TO LIGHTING ELECTRICAL DISTRIBUTION OCCURS.
12. ALL AREAS OF TREE CLEARING SHALL BE STAKED FOR ARCHITECTS APPROVAL PRIOR TO CLEARING.
13. UNLESS OTHERWISE SPECIFIED, ALL PERENNIALS, GRASSES AND GROUNDCOVERS SHALL BE GROWN IN THEIR CONTAINER FOR ONE YEAR PRIOR TO INSTALLATION.

PLANT LIST:

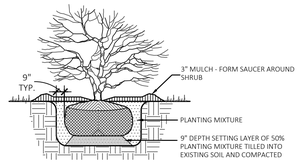
	SYM.	BOTANICAL NAME	COMMON NAME	SIZE	ROOT	SPACING	STATUS
TREES	AF	Acer x freemanii 'Marmo'	Marmo Freeman Maple	2" CAL.	B&B	PER PLANS	NATIVAR
	AS	Acer saccharum 'Commemoration'	Commemoration Sugar Maple	2" CAL.	B&B	PER PLANS	NATIVE
	CC	Carpinus caroliniana	Hornbeam	2" CAL.	B&B	PER PLANS	NATIVE
	GB	Ginkgo biloba 'Autumn Gold'	Autumn Gold Gingko Tree (no female)	2" CAL.	B&B	PER PLANS	NON-NATIVE
	OV	Ostrya virginiana	Hophornbeam	2" CAL.	B&B	PER PLANS	NATIVE
SHRUBS	CAH	Clethra alnifolia 'Hummingbird'	Sweet Pepperbush	#3	CONT.	3' O.C.	NON-NATIVE
	POG	Physocarpus opulifolius 'Ginger Wine'	Ginger Wine Ninebark	#3	CONT.	5' O.C.	NATIVAR
	VA	Viburnum acerifolium	Mapleleaf Viburnum	#3	CONT.	5' O.C.	NATIVAR
GRASSES	CA	Carex appalachica	Appalachian Sedge	#1	CONT.	18" O.C.	NATIVE
	PVC	Panicum virgatum 'Cape Breeze'	Cape Breeze Switchgrass	#1	CONT.	36" O.C.	NATIVAR
	SSL	Schizachyrium scoparium Little Arrow 'Nonwrrar'	Little Arrow Little Bluestem	#1	CONT.	24" O.C.	NATIVAR



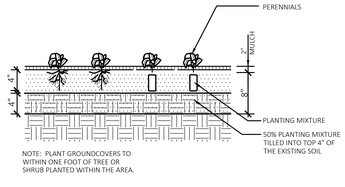
2 Tree On Berm Detail 1/4 Slope or Greater



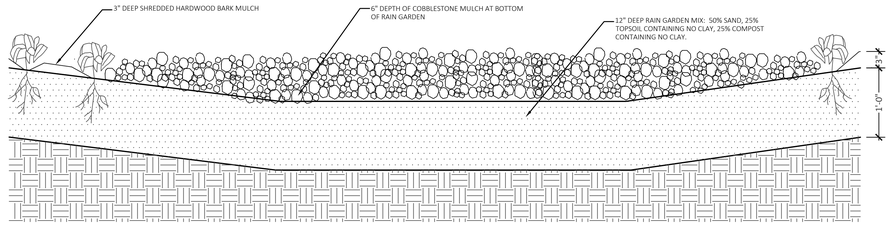
5 Tree Planting Detail



3 Shrub Planting Detail



6 Upright Groundcover Planting



4 Rain Garden Detail

TMP ARCHITECTURE

TMP ARCHITECTURE INC
1191 WEST SQUARE LAKE ROAD
BLOOMFIELD HILLS - MICHIGAN - 48302
PH - 248.338.4561 FX - 248.338.0223
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REGISTRATION SEAL

CONSULTANT

OCBA LANDSCAPE ARCHITECTS
141 E. Michigan Avenue, Suite 500
Kalamazoo Michigan 49007
Phone (269) 381-3357
Fax (269) 381-2944

Landscape Architecture
Urban Planning
Parks & Recreation
Campus & Institutional Planning
Camp Planning & Design

PROJECT TITLE

Wass Elementary School Playground Remodel Bid Package No.01B

Troy School District
Troy, Michigan

DRAWING TITLE

Site Landscape Plan

ISSUE DATES

DATE:	ISSUED FOR:
10-03-2024	CONSTRUCTION DOCUMENTS

DRAWN	DID
CHECKED	DID
APPROVED	DID

PROJECT NO.

22096B

DRAWING NO.

L1.0