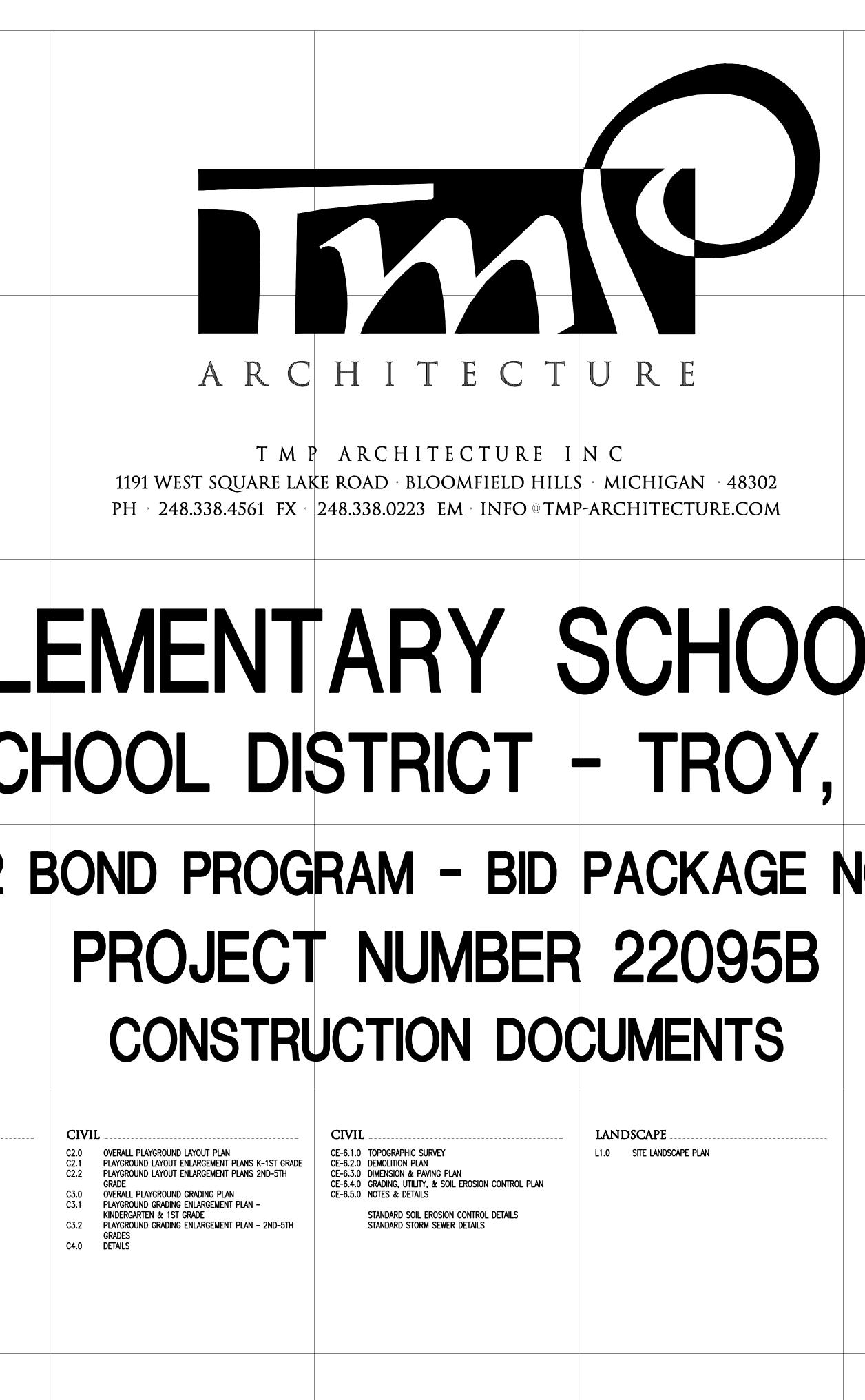
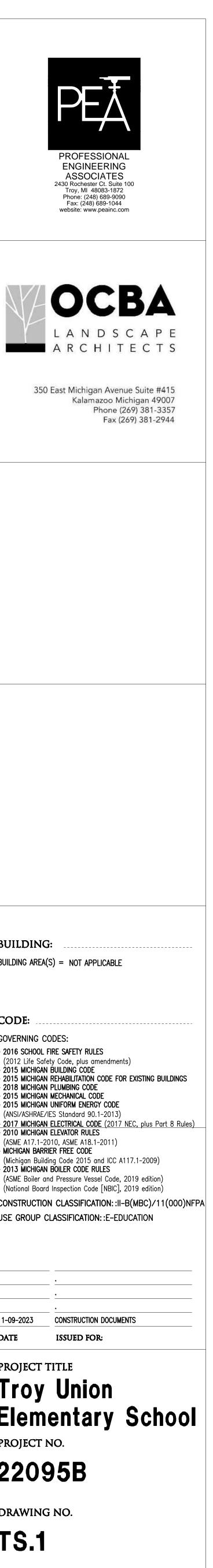
TROY UNIC	DN EL ROY SC 2022
CONSULTANTS: CIVIL ENGINEER PEA GROUP consulting engineers 1849 POND RUN AUBURN HILLS, MICHIGAN 48326 PHONE: (248) 689-9090 PLAYGROUND CONSULTANT OCBA LANDSCAPE ARCHITECTS CONSULTING ENGINEERS 124 FULTON STREET E, SUITE 68 GRAND RAPIDS, MICHIGAN 49503 PHONE: (269) 381-3357	LIST OF DRAWINGS GENERAL INFORMATION TS.1 COVER SHEET TG.1 GENERAL INFORMATION
LICENSEE'S STATEMENT:         This Document has been prepared under the supervision of the Architect, as the person in Responsible Charge with the firm of <u>TMP ARCHTECTURE. INC.</u> An original embossed or rubber stamp seal and original signature of the Architect is required and shall be affixed to any copy of this Document submitted to a governmental agency for approval or record. This is in conformance with the State of Michigan's PA 299, Article 20 and the General Rules of the Board of Architects.         The Architect's seal provided hereon does not take responsibility for certain portions of the Documentation or project requiring the services of a licensed Professional Engineer or other design professional Engineer is required and shall be affixed to any copy of this or other Document submitted to a governmental agency for approval or record. The engineering firms associated with this document are listed above as Consultants.	REGISTRATION SEALS



D D DIA	SOUND
	PROJECT DATA: LOCATION MAP E SOUARE LK. RD. TO 1-75 SITE BU SU SITE BU SU SU SU SU SU SU SU SU SU S
	ADDRESS: TROY UNION ELEMENTARY SCHOOL 1340 E. SQUARE LK. RD. TROY, MI 48098 COPYRIGHT © The "architectural work" displayed on these documents is owned exclusively by TMP Architecture, Inc. and may not be used for any purpose without their involvement or express written consent.



#### **ABBREVIATIONS** DAMPER DAMPPROOFING HNDCP H.R. DMPR DMPFG HANDICAPPE A.F.F. ABOVE FINISH FLOOR IANDRAIL A.R.F. ABR. ABS. ACC. ACC. PI DEAD LOAD DECIBLE H.BD HDW ABOVE REFERENCE FLOOR HARDBOARD HARDWARE HARDWOOD ACCESS PANEL DMT. PARTN DEMOUNTABLE PARTITION HDR HEADER COUSTIC/ACOUSTICAL HEAT ABSORBING GLASS DEPARTMEN ACOUSTIC TILE DEPR. DEPRESSED HEAT RECOVERY UNIT H.R.U ACOUSTIC INSULATION AC. INSUI ADD. ADDN. ADDNL. ADH. HEATING DDENDU D.E. CO. DETROIT EDISON COMPANY H/V HEATING AND VENTILATING H.V.A.C. HEATING, VENTILATING AND ADHESIVE DIAGRAM AIR CONDITIONING DIAMETER HEATING HOT WATER SUPPLY ADJUSTIB HHWR ADJ. AGGR AGGREGATE HHW HEATING HOT WATER RETURN A.C.B. AIR CIRCUIT BREAKER DIMENSION CONDITIONING **DINING ROOI** HEXAGON A.C.C A.C.U CONDITIONING COMPRESSOR DIRECTORY H.I.D HIGH INTENSITY DISCHARGE A.H.U. DISCONT. DISCONTINUOUS H.P. HIGH POINT AIR HANDLING UNI ALT. ALUM./A ISHWASHER H.PF HIGH PRESSURE DISPENSER HIGH STRENGTH LUMINUM H.S. AMT AMP AMPL. ANCH. A.B. HIGH STRENGTH BOLT HIGH VOLTAGE H.S.B. DISTANCE AMPHERE DISTRIBUTION PANE H.V. DITTO (DO OVER) DIVIDER/DIVISION AMPLIFIEF HWY HIGHWAY ANCHOR HSTWY HOISTWAY ANCHOR BOL H.C. HOLLOW CORE DOOF DOOR OPENING Н.М. HOLLOW META D.O. DR. OP. DOOR OPERATOR HNYCB HONEYCOMB ANG./Lor ANOD APT. ANODIZED ΗK HOOK HORIZONTAL APARTMEN<sup>®</sup> DOUBLE ACTING HORIZ. APPR. APPROX. APPROVED DOUBLE HUNG HORSEPOWER APPROXIMAT Hose BIBB ARCH. ARCHITECT/ARCHITECTURA DOWN H.S.P. HOSE STAND PIPE ARCHITECTURAL DRAWING-N DOWNSPOU H.V.0 HOSE VALVE CABINE ASH TRAY HOSP. HOSPITAL HOT WATER AUTOMATIC TELLER MACHINI H.W. ASPH ASSY. DRAIN TILE CONNECTO HWR HOT WATER RETURN HOT WATER SUPPLY SSEMBL DRAWING AUTOMATIC DRINKING FOUNTAIN H.O. HUB OUTLET A.S.R. AUTOMATIC SPRINKLER RISER HYDRANT/HYDRAULIC DRY BULB HYD. D.B. D.S.P. AUXILIARY DRY STAND PIPE HYDROGEN AVERAGE DBWTR DUMBWAITER DUPLICATE D.DR. DUTCH DOOR BACK-TO-BACK BACK FLOW PREVENTER EACH DENTIFICATION EACH FACE B.F.F NCANDESCENT INCAND. B.D.C EACH WAY IN. or " NCH/INCHES BACK DRAFT DAMPER B.F. B.B.R **NCINERATOF** E.I.F.S. BASE BOARD RADIATION EXTERIOR INSULATION FINISH SYS INCLUDE/INCLUDING INCL. B.PL BSM1 NDIRECT WASTE SE PLATE STOMERI ELAST. FLASH. ELASTOMERIC FLASHING NFORMATION ELAST. W.P. ELASTOMERIC WATERPROOFIN BATH ROOM INSIDE DIAMETER ELASTOMERIC SHEET ROOFING INSIDE FACE ELECTRIC/ELECTRICAL INSTALL/INSTALLATIO BACK OF CURB ELEC. INST'L ELECTRICAL CLOSE INSULATE/INSULATION BEDROOM ELEC. CAB. ELECTRICAL CABINET INTERIOR INTER. INTERMEDIATE BENCH MARK LECTRICAL CONTRACTOR ELECTRICAL DRAWING-NO. INVER1 ELECTRICAL PANEL INVERT ELEVATION BETWEEN LECTRIC WATER COOLER ELEC. OPER. ELECTRICALLY OPERATED BITUMINOU BLACK-IRON \_EVATION BLOCK ELEVATOR BLOCKING EMERC EMERGENCY BOARD ENCLOSURE BOILER ENGR JANITOR CLOSET ENGINEER BLR. BOILER FEED END-TO-END BLR. H. BOILER HOUS ENTR. ENTRANCE/ENTRY JOIST BOOK SHELVE JUNCTION BOX Both Sides EPDM ETHYLENE PROPYLENE DIENE JUNIOR BOTH WAYS MONOMER BOTTOM EQUAL EQUIPMENT BOTTOM ELEVATIO BLVD BDRY BRKT EQUIV. EQUIVALENT BOUNDARY ESCALATOR BRACKET ESTIMATE EXCAVATED K.P. KICK PLATE EXHAUST DUCT BRICK KILOVOLT AMPHERE BRITISH THERMAL UNIT BRONZE KILOWATT KIP (1000#) btu Brz Bldg EXHAUST FAN KW EXHAUST GRILLE KITCHEN KNEE SPACE E.R. EXIST. EXP. EXP.B. BUILDING EXHAUST REGISTER KIT. BUILDING LIN EXISTING K.D. K.O.P. BUILT-UP ROOFING EXPANSION KNOCK DOWN BULLNOSE BULKHEAD B.N. BLKD EXPANSION BOLT KNOCK-OUT PANEL E.J. EXPL.P EXP'D EXT'N EXT. **EXPANSION JOINT** BULLETIN EXPLOSION PROOF BURGLAR ALARM EXPOSED BUZZER EXTENSION EXTERIOR E.I.F.S. LABEL LABORATORY EXTERIOR INSULATION FINISH LBL. SYSTEM E.H. EXTR. E.S.P. EXTRA HEAVY LADDER LAG BOLT EXTRUDED L.B. CABINET CABINET UNIT HEATER CAPACITY EXTERNAL STATIC PRESSURE CAB. LAMINATE/LAMINATED C.U.H. CAP. CPT C.R.S. CSMT CSWRK CSG LANDING LANDSCAPE DRAWING-NO. CARPET CARPET REDUCER STRIP LARGE LAUNDRY LAVATORY CASMENT LEFT HAND LEFT HAND REVERSE BEVEL FABRICATED/FABRIC ASEWORK L.H.R.B. CASING F/F FACE-TO-FACE C.I. C.I.F. C.I.P. CSTG CAT. NO CAST IRON F. FIN. FACTORY FINISH LENGTH LEVEL LIBRAR<sup>®</sup> LIGHT LGTH CAST IRON FRAME F.C.U. FAN COIL UNIT CAST IRON PIPE/CAST-IN-PLACE F.S. FAR SIDE FASTENER FEEDER CATALOG NUMBER LIGHTPROOF LIGHTING LIGHTING PANEL FEET/FOOT CATCH BASIN LTG FEET PER MINUTE CEILING FPM LIGHTING RECEPTACLE PANEL LIGHTWEIGHT C.D. CLG. HT FENCE FORM BOARD L.R.P. LTWT CEILING DIFFUSE F.BD. EILING HEIGHT CEM. CEM. PLA FIGURE LTWT. CONC. LIGHTWEIGHT CONCRETE FIG. EMENT PLASTER FINISH/FINISHED **\_IMESTON** FIN. FLR/F.F. FINISH FLOOR LINTEL CENTER F.T.R. FINNED TUBE RADIATION LIN. DIFF. LINEAR DIFFUSER CENTER-TO-CENTER F.A. FIRE ALARM LINEAR FEET/FOOT F.A.C.P. F. BRK LIQUID LIQUID PROPANE GAS CERAMIC CERAMIC TILI FIRE ALARM CONTROL PANEL FIRE BRICK C.BD. CHAM. CHG. CHAN. CHKD. CHKD. CHWR CHWS CHD CHCUM FIRE DAMPER FIRE EXTINGUISHER CHALKBOARD LIQUID PETROLEUM GAS L.P.G F.D. CHAMFER CHANGE LIVE LOAD F.E.C. FIRE EXTINGUISHER CABINET IVING ROOM CHANNEL CHECKERED PLATE LOCATION LOCKER F.H.C. FIRE HOSE CABINET F.H. FIRE HYDRANT LONG LEG HORIZONTAL LONG LEG VERTICAL FIRE LINE FIRE RETARDANT/FIRE RATED CHILLED WATER RETURN F.L. F.R. CHILLED WATER SUPPLY L.L.H. F.R.T.WD FIRE RETARDANT TREATED WOOD L.L.V. LOUVER LOUVER OPENING CIRCUMFERENCE F.V.C. FIRE VALVE CABINET CIR. CIRC C.BR CIRCLE/CIRCULAR FIREPLACE FPRFG. FIXT. FLASH. FHMS FHWS FIREPROOFING LOW POINT LOW PRESSURE CIRCUIT BREAKER FIXTURE L.PR. FLASHING FLAT HEAD MACHINE SCREW LUMBER POUNDS CIVIL DRAWING-NC LBS. or # CLRM C.O. CLR CLR GL CLR W.G FLAT HEAD WOOD SCREW CLASSROOM CLEAN OUT FLEXIBLE CONNECTION FLOOR F.C. FLR FLOOR CLEAN OUT FLOOR DRAIN FLOOR FINISH F.C.O. F.D. CLEAR GLASS CLEAR WIRE GLASS FLR. FIN. FLUOR. FLDG FTG CLOSET CLOSUR FLUORESCENT FOLDING FOOTING FORMBOARD COAT CLOSE MACH. MACHINE MACHINE BOLT MACHINE ROOM OEFFICIEN COLD WATER FM. BD MACH. RM FOUNDATION M.A.U. M.D.P. MAKE-UP AIR UNIT OLUMN FRAME FRAME AND COVER COMPANY MAIN DISTRIBUTION PANEL M.S.B. MAINT. OMPARTMEN FR/COV MAIN SWITCH BOARD FRMG FRZR OMPOSITION MAINTENANCE FRAMING OMPRESSED A FREEZER OMPRESSOR FULL SIZE MFR MANUFACTURER F.S. FURN. FURR. FUT. MARBLE MARK CONCRETE FURNISH/FURNISHED CONCRETE MASONRY UNIT CONDENSING WATER RETURN FURRING/FURRED FUTURE MASONRY M.O. MATL MASONRY OPENING ONDENSING WATER SUPPLY MATERIAL MAXIMUM ONFERENCE MAX. MECHANICAL MECHANICAL DRAWING-NO CONSTRUCTION GAUGE GALLON GALLONS PER HOUR GALLONS PER MINUTE MEDICINE CABINET ONTROL JOINT CONTINUE/CONTINUOUS MEDIUM GAL. GPH GPM MEMB. MET. M.D.S. M.E.S. ONTRACTOR MEMBRANE CONTROL PANEL METAL CONVECTOR CONVEYOR GALV. GALV. I. GALVANIZED METAL DIVIDER STRIP GALVANIZED IRON METAL EDGE STRIP CORNER METAL LATH GASKET GATE VALVE AND BOX ORNER GUARD GSKT G.V.& B. M.L.& PLAS. METAL LATH AND PLASTER ORRIDOR/CORRUGATED METAL THRESHOLD OPPER GENERAL GLASS MET. W.P. METALLIC WATERPROOFING GEN'L. MEZZANINE CTSK CRS. GLAZING GLAZED HOLLOW TILE COUNTERSIN GLZ G.H.T. MDOT MICHIGAN DEPARTMENT OURSE TRANSPORTATION COV. COV. PI C.C.T. CU.FT. GRAB BAR GRADE/GRILLE GRADE BEAM COVER MWK MILLWORK COVER PLATE MINIMUM CUBICAL CURTAIN TRACK MIRROR CUBIC FEET/ CUBIC FO CUBIC FEET PER MINUT GRATING GRID LINE MIRROR AND SHELF MISCELLANEOUS GRANITE GREASE SEPARATOR

GREASE TRAP

GUTTER ELEVATION

GYPSUM GYPSUM BOARD

GROUT

G.F.I.

GYP. GYP.BD.

GROUND FAULT INTERRUPTOR

REG. REGISTER REINF. **REINFORCE/REINFORCING/** REINFORCEMENT REM REMOVE/REMOVABLE REPAIR REQ'D. REQUIRED RESILIENT RETURN RESIL RETURN AIR R.A. RETURN AIR DIFFUSER R.A.D RETURN AIR FAN R.A.F. REVISED/REVISION REV. **REVOLUTIONS PER MINUTE** RPM RISER RIGHT HAND RIGHT HAND REVERSE BEVEL R.H. R.H.R.B. R.O.W. RVT RIGHT OF WAY RIVET ROAD ROLLING STEEL CURTAIN R.S.C. ROOF ROOF CONDUCTOR ROOF DRAIN ROOF HATCH ROOF SUMP ROOF VENTILATOR ROOFING ROOF TOP UNIT R.T.U. ROOM ROUGH OPENING Round Round Head Machine Screw RND or ¢ RHMS RHWS SAN. S.N.D. S.N.R. SCHED. SCN SECT. SERV SHTHG SHT SHT. MET. SH.& R. SHWR S.C.R. SPR. SPKR

SPEC.

spryd Spklr

STAG. ST.STL

STD

STM

STIFF.

STOR.

STR.

STL. PL.

STO. FR.

STRUCT.

S.G.F.T.

SS.D. SS.D.C.

S.STL

SUB. S.A.G.

SUBST

S.A.R.

S.D.

S.F.

MISCELLANEOUS IRON

MOP STRIP AND SHELF

MEETING/MOUNTING

MOTOR OPERATED DAMPER

NOISE REDUCTION COEFFICIENT

MODEL

M.S.& S

M.O.D.

MLDG MTD

MTG

MULL M

NAT.

N.S.

NEUT.

NOM. NOR.

NOS. N.I.C. N.T.S.

NO. or #

Ν

MONUMENT

MOULDING MOUNTED

MOVEABLE

MULLION THOUSAND (1000)

NATURAL

NEAR SIDE

NEUTRAL

NOMINAL

NORMAL NORTH

NUMBER

NOSING NOT-IN-CONTRACT

NOT-TO-SCALE

MOV. PARTN. MOVEABLE PARTITION

OBSCUR

OPAQUE

OPENING OPERATOR

OFFICE ON CENTER

OBSCURE GLASS

OPPOSITE OPPOSITE HAND

ORIGINAL ORNAMENTAL

OUT-TO-OUT

OUTSIDE AIR

OVERHEAD

OXYGEN

PAINTED

PAIR

PAGE

OUTSIDE DIAMETE OUTSIDE FACE

OVAL HEAD SCREW

OVERHEAD DOOR

PAPER TOWEL DISPENSER

PAPER TOWEL WASTE

RECEPTACLE

PARTICLE BOARD

PARALLEL

PASSAGE

PAVEMENT

PEDESTAL

PERFORATED

PERIMETER PERMANENT

PERPENDICULAR

PLASTIC LAMINATE

POINT OF TANGENCY

POLISH/POLISHED

POLYVINYLCLORIDE

PORCELAIN ENAMEL

POST INDICATOR VALVE

POUNDS PER LINEAR FOOT

POUNDS PER SQUARE FOOT

POUNDS PER SQUARE INCH

PRECAST TERRAZZO RECEPTOR

PRESERVATIVE TREATED WOOD

PRESSURE REDUCING VALVE

POUNDS PER CUBIC FOOT

PORCELAIN

POROUS

PORTABL

POSITION

POWER PANEL

PREFABRICATED

PRESSURE GAUGE

PROPERTY LINE

PUBLIC ADDRE

PURSE SHELF

PUSH BUTTON

QUANTITY

RABBET RADIUS

RAILROAD

RECESS

REDUCER

REDWOOD

RECEPTACLE

QUARRY TILE QUARTER QUARTER ROUND

RAIN WATER CONDUCTOR

RECTANGLE/RECTANGULAR

REFLECTED/REFLECTIVE

RECEIVE/RECEIVING

RECEPTACLE PANEL

REFER/REFERENCE

REFRIGERATOR

PROJECT/PROJECTION

PROPERTY/PROPOSED

PREFINISHED

POINT OF CURVATURE

PLATE GLASS

PLATFORM

PLUMBING

PLYWOOD

PHYSICALLY HANDICAPPED

PHOTOGRAPH

PIECE

PLASTER

OBS.GL

OPQ. OPG. OPER OPP.

OPP.HD.

0.H.S.

OHD OHD.DR

PTD

PNL P.T.D.

PRI PK(

P.BD

PRTN

PAT.

PASS.

**PVMT** 

PVG

PED.

PERF

PERIM. PERM. PERP.

P. or Ø PHOTO.

PLAS.

PL. LAM

PL. GL.

PLAT.

PLBG

PLWD

POL. PVC

POR.

PORT

POS.

PCF

P.T.R.

PFN.

P.G.

P.R.V

PRIM.

PROJ PROP

QTY Q.T.

QTR. RD

RBT RAD. or R.

R.W.C.

RECV.

REFF

R.R.

PREFAB.

P.T.WD

PORC. PORC. ENAM

P.T

P.T.W.R.

ROUND HEAD WOOD SCREW RUBBER TILE Sanitary Sanitary Napkin Dispenser Sanitary Napkin Receptacle SCHEDULE SCREEN SEATING SECTION SERVICE SERVICE SINK SHEATHING SHEET SHEET METAL SHELF AND ROD SHOWER SHOWER CURTAIN ROD SHOWER DOOR SIDEWALK SIMILAR SINGLE SINK SOAP DISPENSER SOLID CORE SOUND TRANSMISSION CLASS SOUTH SPACE SPARE SPEAKER SPECIFICATIONS SPLITTER DAMPER SPRAYED SPRINKLER SQUARE SQUARE FEET/SQUARE FOOT STAGGERED STAINLESS STEEL STANDARD STANDPIPE STATIC PRESSURE STATION STEAM STEEL STEEL PLATE STIFFENER STOREFRONT STORAGE STRAIGHT STREET STRUCTURAL STRUCTURAL DRAWING-NO. STRUCTURAL GLAZED FACING TILE

STRUCTURAL STEEL SUBSOIL DRAIN SUBSOIL DRAIN CONNECTION SUBSTATION SUPPLY AIR GRILLE SUPPLY DIFFUSER/ DUCT SUSTITUTE SUPPLY AIR REGISTER

SUPPLY FAN

CULV C.D.

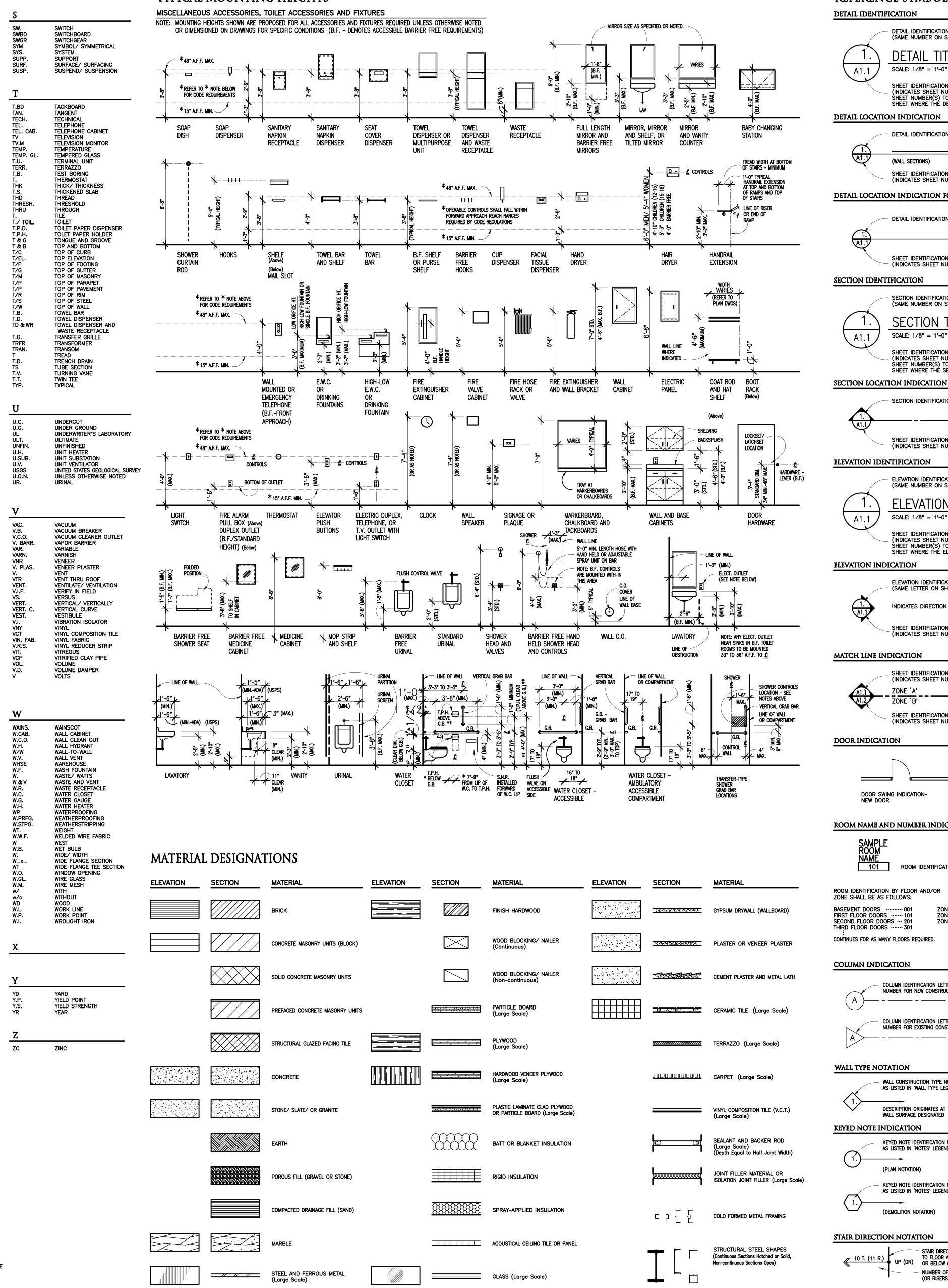
CYC.

CULVERT

CYCLES

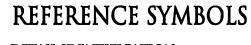
CUP DISPENSER

## TYPICAL MOUNTING HEIGHTS



ALUMINUM AND NON-FERROUS METAL (Large Scale)

GLASS (Small Scale)



- DETAIL IDENTIFICATION NUMBER (SAME NUMBER ON SHEET WHERE DRAWN OR REFERENCED) DETAIL TITLE SCALE: 1/8" = 1'-0" SHEET IDENTIFICATION NUMBER (INDICATES SHEET NUMBER WHERE DETAIL IS DRAWN OR SHEET NUMBER(S) TO REFER TO WHEN REFERENCED ON THE SHEET WHERE THE DETAIL IS DRAWN) DETAIL IDENTIFICATION NUMBER (A1.1) (WALL SECTIONS) (PLAN SECTIONS) SHEET IDENTIFICATION NUMBER (INDICATES SHEET NUMBER WHERE DETAIL IS DRAWN) DETAIL LOCATION INDICATION FOR ENLARGED PLANS DETAIL IDENTIFICATION NUMBER SHEET IDENTIFICATION NUMBER (INDICATES SHEET NUMBER WHERE DETAIL IS DRAWN) SECTION IDENTIFICATION NUMBER (SAME NUMBER ON SHEET WHERE DRAWN OR REFERENCED) SECTION TITLE SCALE: 1/8" = 1'-0" SHEET IDENTIFICATION NUMBER (INDICATES SHEET NUMBER WHERE SECTION IS DRAWN OR SHEET NUMBER(S) TO REFER TO WHEN REFERENCED ON THE SHEET WHERE THE SECTION IS DRAWN) SECTION IDENTIFICATION NUMBER SHEET IDENTIFICATION NUMBER (INDICATES SHEET NUMBER WHERE SECTION IS DRAWN) ELEVATION IDENTIFICATION NUMBER (SAME NUMBER ON SHEET WHERE DRAWN OR REFERENCED) ELEVATION TITLE SCALE: 1/8" = 1'-0" SHEET IDENTIFICATION NUMBER (INDICATES SHEET NUMBER WHERE ELEVATION IS DRAWN OR SHEET NUMBER(S) TO REFER TO WHEN REFERENCED ON THE SHEET WHERE THE ELEVATION IS DRAWN) ELEVATION IDENTIFICATION NUMBER(S) (SAME LETTER ON SHEET WHERE DRAWN OR REFERENCED) INDICATES DIRECTION OF VIEW OR MULTIPLE VIEWS SHEET IDENTIFICATION NUMBER INDICATES SHEET NUMBER WHERE ELEVATION IS DRAWN) SHEET IDENTIFICATION NUMBER (INDICATES SHEET NUMBER OF DRAWING) ZONE 'A' ZONE 'A' A1.1 ZONE 'B' ZONE 'B' A1.2 ZONE 'A' SHEET IDENTIFICATION NUMBER (INDICATES SHEET NUMBER WHERE DRAWING IS CONTINUED) DOOR SWING INDICATION-DOOR SWING INDICATION-DOOR SWING INDICATION-EXISTING DOOR TO BE REMOVED EXISTING DOOR ROOM NAME AND NUMBER INDICATION DOOR IDENTIFICATION DOOR TO ROOM SHALL REPEAT ROOM NUMBER ASSIGNED TO ROOM. MULTIPLE DOORS TO ROOM SHALL REPEAT ROOM NUMBER WITH A POSTSCRIPT LETTER FOR EACH ADDITIONAL DOOR ROOM IDENTIFICATION NUMBER REQUIRED. 101 / 101A / 101B FOR NUMBER NEEDED DOOR IDENTIFICATION BY FLOOR AND/OR ZONE SHALL BE AS FOLLOWS: ZONE A ··A101 ZONE B ··B101 ZONE C ··C101 ZONE A ··· A101 ZONE B ··· B101 ZONE C ··· C101 BASEMENT DOORS ...... 001 FIRST FLOOR DOORS ...... 101 SECOND FLOOR DOORS ··· 201 THIRD FLOOR DOORS ...... 301 CONTINUES FOR AS MANY FLOORS REQUIRED. NORTH INDICATION ASSUMED NORTH IF NOT COLUMN IDENTIFICATION LETTER OR NUMBER FOR NEW CONSTRUCTION TRUE NORTH OR PLAN NORTH WHERE TRUE NORTH IS INDICATED BY ARROW NOTATION COLUMN IDENTIFICATION LETTER OR NUMBER FOR EXISTING CONSTRUCTION TRUE \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ NORTH CASEWORK NOTATION WALL CONSTRUCTION TYPE NUMBER ASEWORK IDENTIFICATION NUMBER BASED ON MANUFACTURERS CATALOG AS LISTED IN 'WALL TYPE LEGEND' NUMBERS AS NOTED IN SPECIFICATIONS OR 'CASEWORK LEGEND' A1-100-36 ------DESCRIPTION ORIGINATES A WALL SURFACE DESIGNATE ADDENDUM INDICATION KEYED NOTE IDENTIFICATION NUMBE ADDENDUM NUMBER AS LISTED IN 'NOTES' LEGEND. (Current revisions shall be shown Encircled by a freeform line) (PLAN NOTATION) BULLETIN INDICATION KEYED NOTE IDENTIFICATION NUMBER AS LISTED IN 'NOTES' LEGEND. BULLETIN NUMBER (CURRENT REVISIONS SHALL BE SHOWN (DEMOLITION NOTATION) ENCIRCLED BY A FREEFORM LINE) DRAWING DIMENSION LINE INDICATION STAIR DIRECTION TO FLOOR ABOVE (UP) NOTE: DO NOT SCALE DRAWINGS WITHOUT UP (DN) TO FLOOR ABUVE (UP (DN) 10'–0" GRAPHIC SCALES WITH NUMBER OF TREADS PROPORTIONS OTHER (or risers) in stair run THAN 1:1 DRAWING NOTATION INDICATION MATERIAL OR WORK DIVISION NOTATION MATERIAL NOTATION AND INFORMATION MATERIAL 'A' MATERIAL 'B' (REFER TO TECHNICAL SPECIFICATIONS (NEW CONST.) (EXIST. CONST.) FOR MATERIAL DESCRIPTIONS AND METHODS JOINT BETWEEN MATERIALS OF CONSTRUCTION)



PROJECT NO.

22095**B** 

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CONSTRUCTION DOCUMENTS
ISSUED FOR:

# DRAWING TITLE General Information

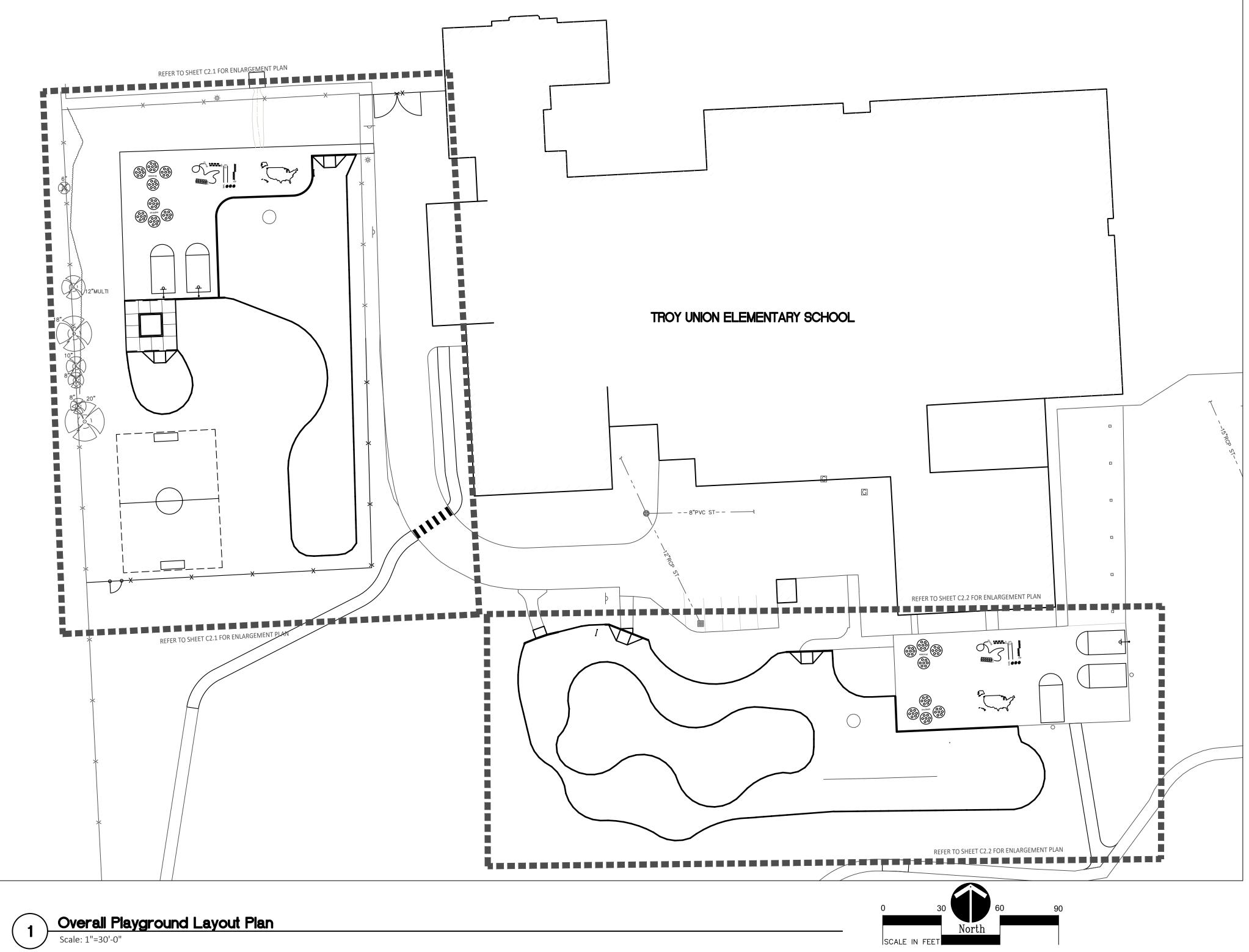
**Troy School District** Troy, Michigan

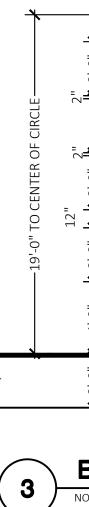
# PROJECT TITLE **Troy Union Elementary School Playground Remodel Bid Package No.01A**

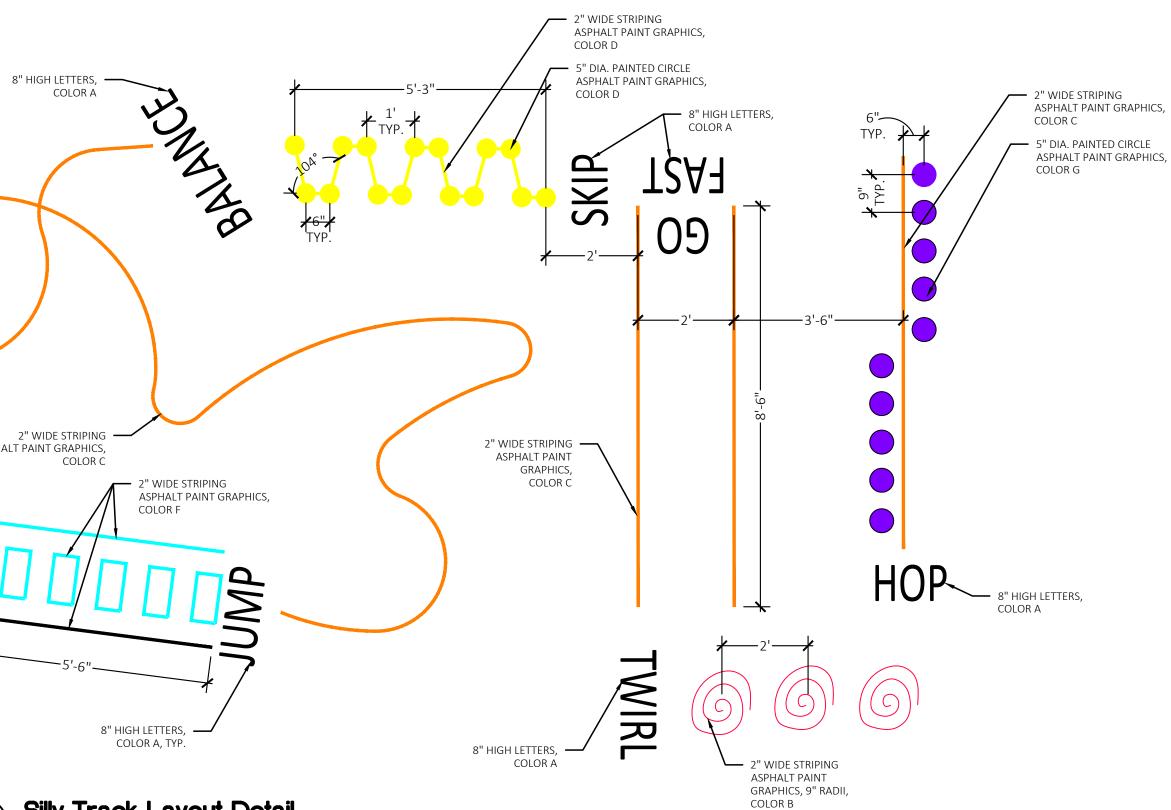
CONSULTANT

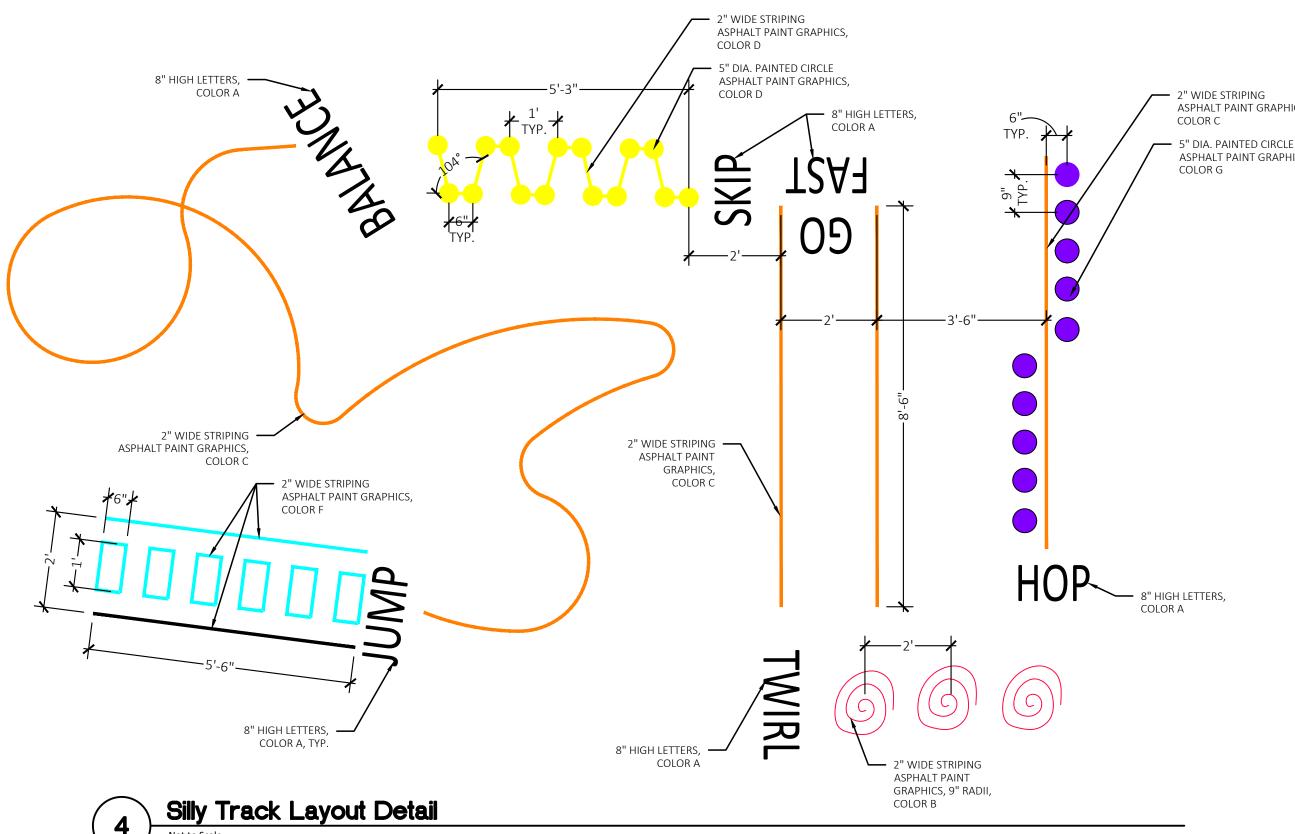
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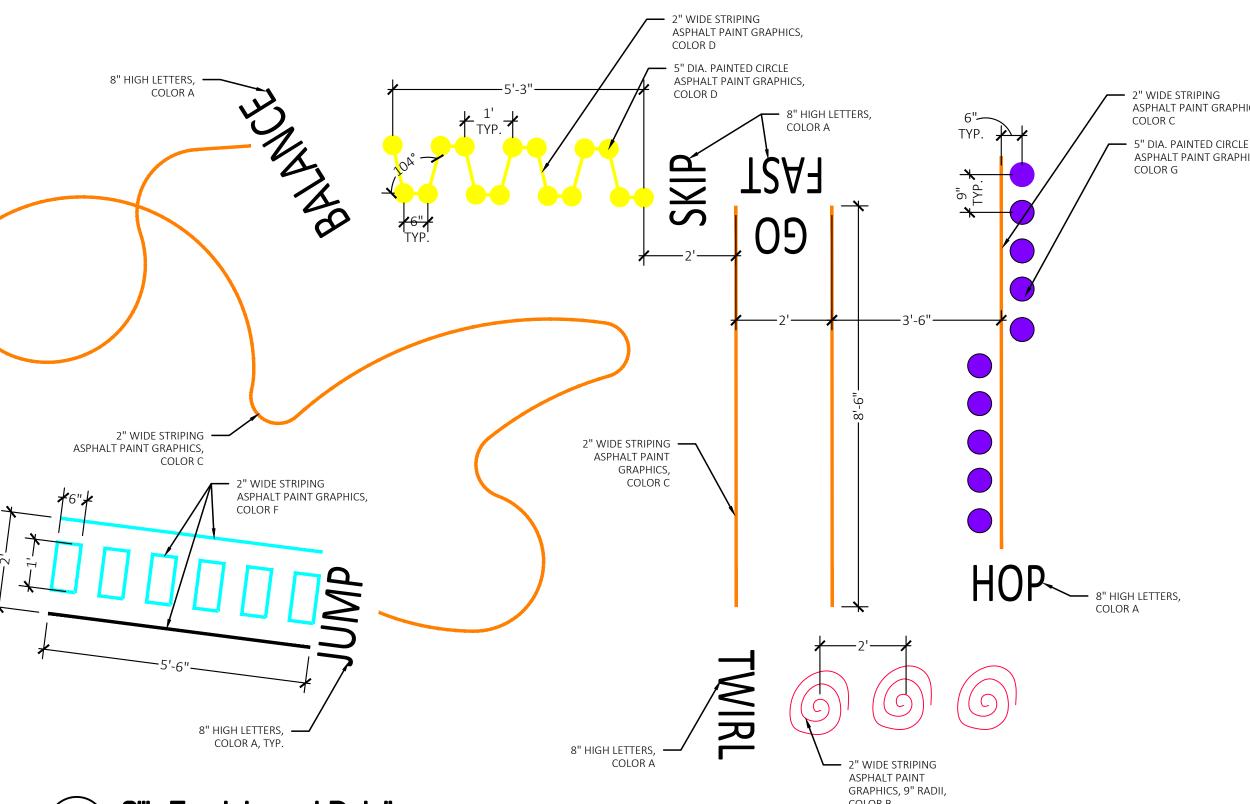


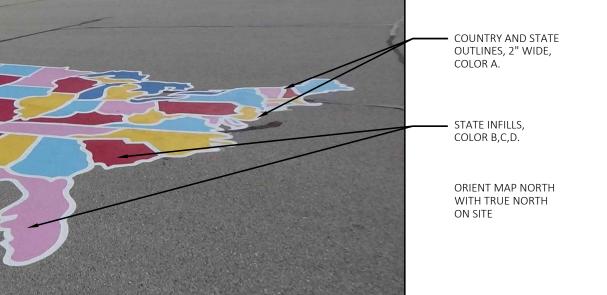








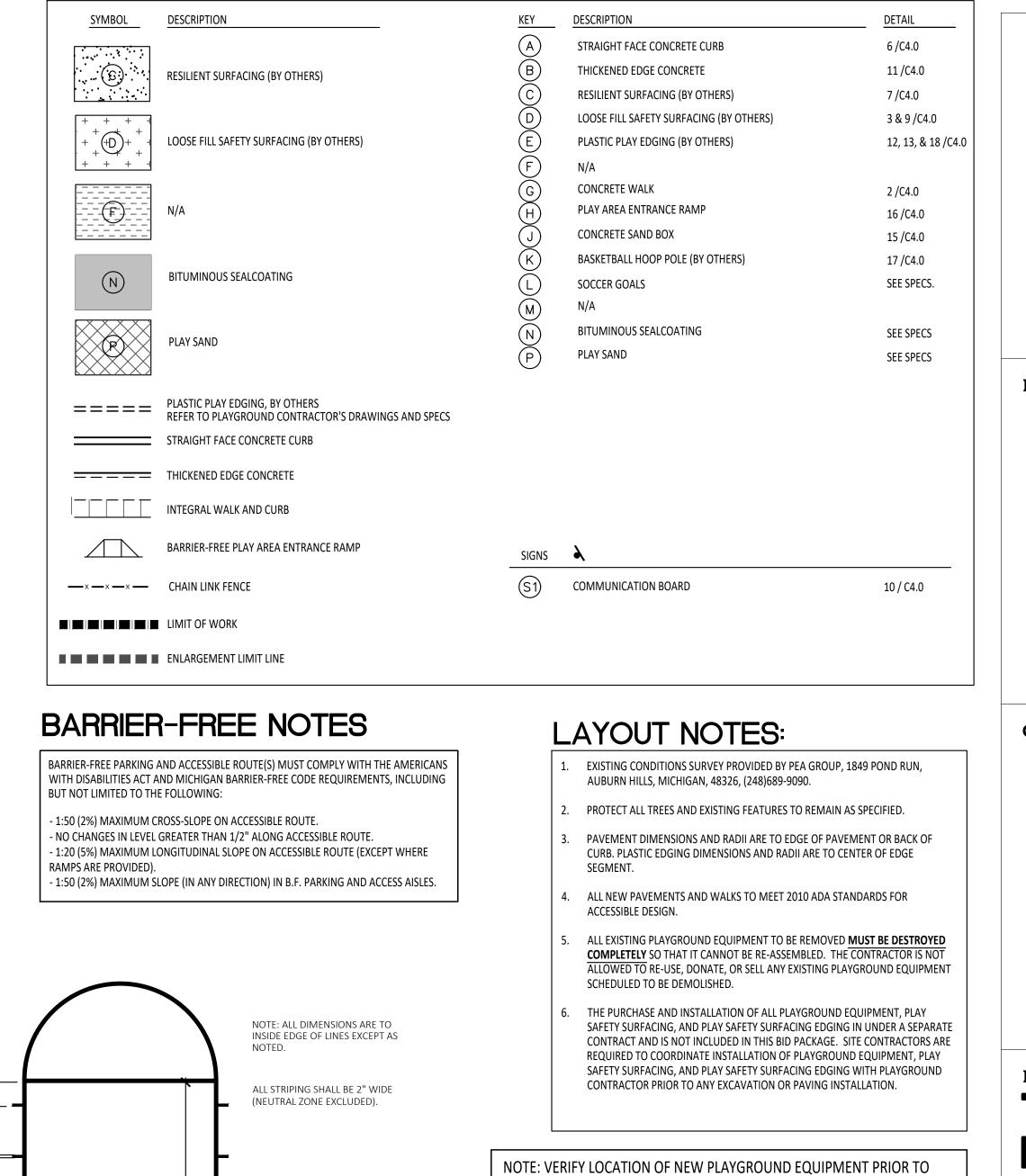








# PROPOSED FEATURES LEGEND:



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.

**Basketball Lane Layout** 

6'-0"

—12'-0"——

✓ LANE SPACE MARKS

-NEUTRAL ZONE MARKS

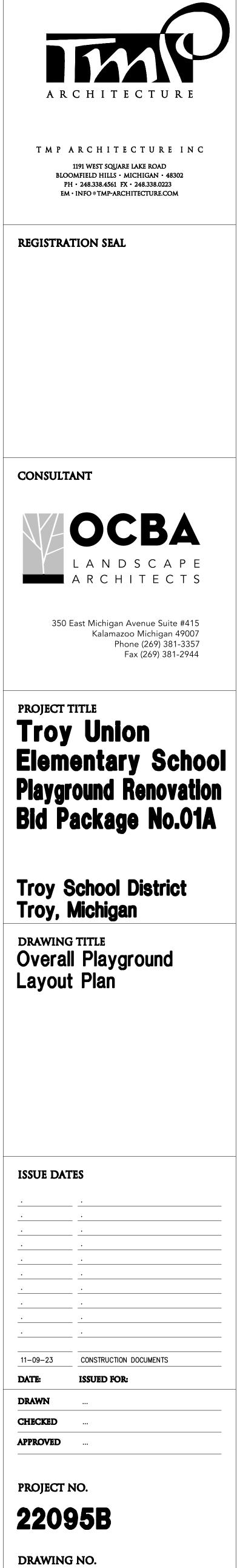
DETAIL 17/C4.0

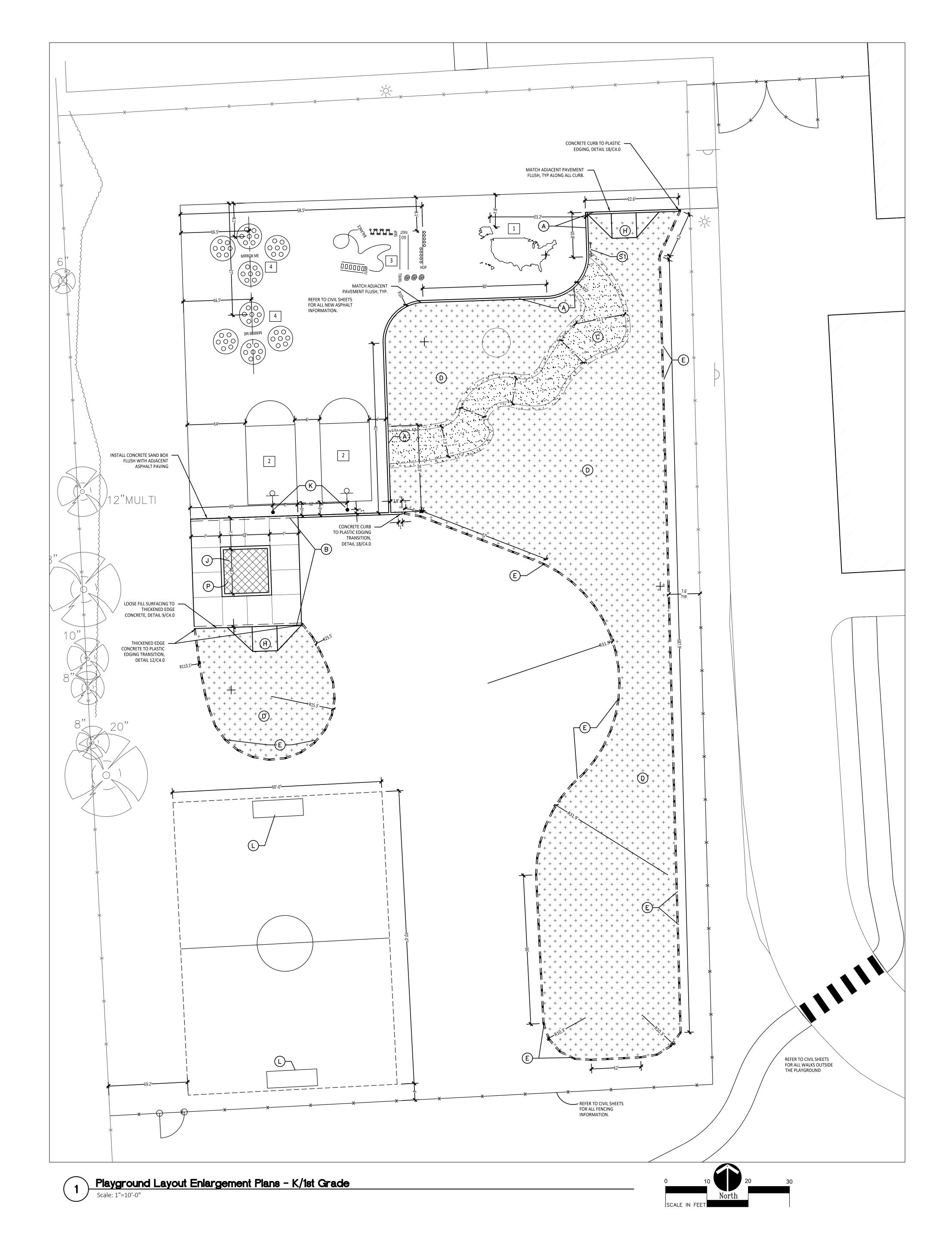
EDGE OF PAVEMENT

NOT TO SCALE

DATE:

**C2.0** 





# PROPOSED FEATURES LEGEND:

SYMBOL	DESCRIPTION	KEY	DESCRIPTION	DETAIL
		A	STRAIGHT FACE CONCRETE CURB	6 /C4.0
$(\mathbf{c})$	RESILIENT SURFACING (BY OTHERS)	B	THICKENED EDGE CONCRETE	11 /C4.0
		Ċ	RESILIENT SURFACING (BY OTHERS)	7 /C4.0
+ + + +		C D E	LOOSE FILL SAFETY SURFACING (BY OTHERS)	3 & 9 /C4.0
	LOOSE FILL SAFETY SURFACING (BY OTHERS)	E	PLASTIC PLAY EDGING (BY OTHERS)	12, 13, & 18 /C4.0
+ + + +		F	N/A	
		G H	CONCRETE WALK	2 /C4.0
	N/A	H	PLAY AREA ENTRANCE RAMP	16 /C4.0
		J	CONCRETE SAND BOX	15 /C4.0
		(J)	BASKETBALL HOOP POLE (BY OTHERS)	17 /C4.0
N	BITUMINOUS SEALCOATING	L	SOCCER GOALS	SEE SPECS.
		M	N/A	
	PLAY SAND	N P	BITUMINOUS SEALCOATING	SEE SPECS
		P	PLAY SAND	SEE SPECS
=====	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	SIGNS	X	
— x — x — x —	CHAIN LINK FENCE	<u>(S1)</u>	COMMUNICATION BOARD	10 / C4.0
	LIMIT OF WORK			
	ENLARGEMENT LIMIT LINE			

## KINDERGARTEN + 1ST GRADE PAINTED GAMES SCHEDULE:

SYMBOL	DESCRIPTION	DETAIL
1	MAP OF UNITED STATES	2 /C2.0
2	BASKETBALL LANE LAYOUT	3 / C2.0
3	SILLY TRACK	4 / C2.0
4	MIRROR ME	2 / C2.1
5	N/A	

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.

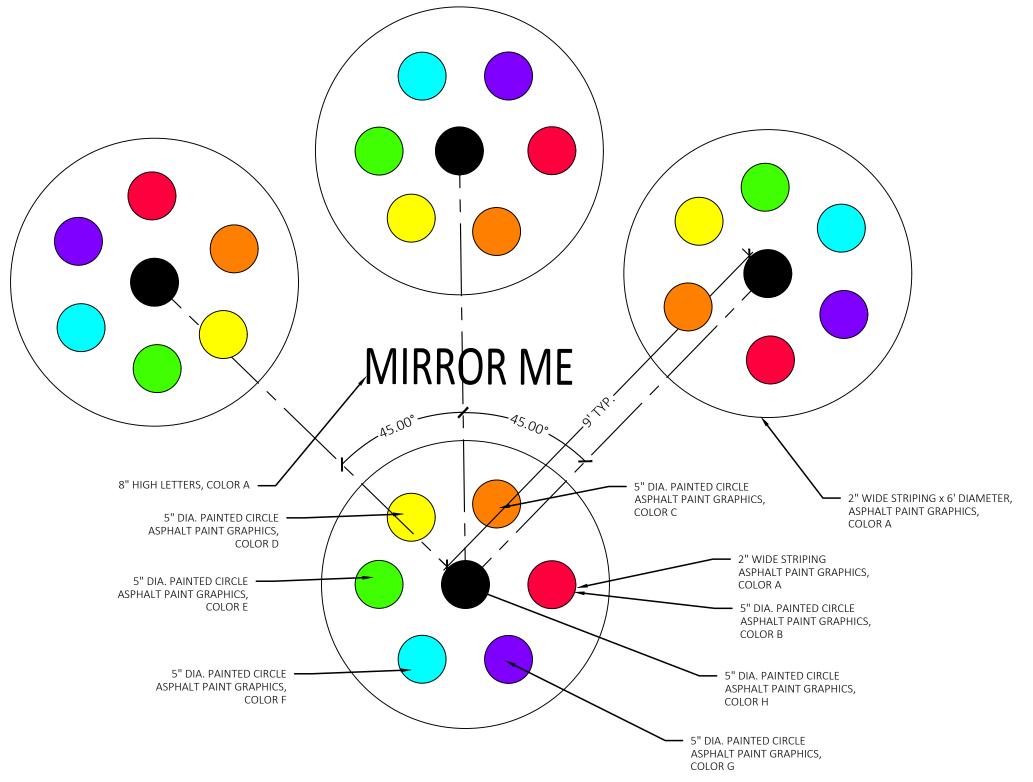
## LAYOUT NOTES:

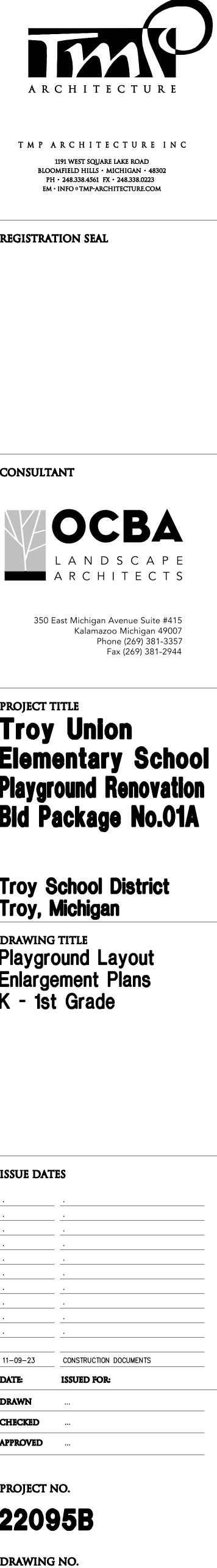
- . EXISTING CONDITIONS SURVEY PROVIDED BY PEA GROUP, 1849 POND RUN, AUBURN HILLS, MICHIGAN, 48326, (248)689-9090.
- PROTECT ALL TREES AND EXISTING FEATURES TO REMAIN AS SPECIFIED. PAVEMENT DIMENSIONS AND RADII ARE TO EDGE OF PAVEMENT OR BACK OF CURB. PLASTIC EDGING DIMENSIONS AND RADII ARE TO CENTER OF EDGE
- SEGMENT. ALL NEW PAVEMENTS AND WALKS TO MEET 2010 ADA STANDARDS FOR ACCESSIBLE DESIGN.
- 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.
- THE PURCHASE AND INSTALLATION OF ALL PLAYGROUND EQUIPMENT, PLAY SAFETY SURFACING, AND PLAY SAFETY SURFACING EDGING IN UNDER A SEPARATE CONTRACT AND IS NOT INCLUDED IN THIS BID PACKAGE. SITE CONTRACTORS ARE REQUIRED TO COORDINATE INSTALLATION OF PLAYGROUND EQUIPMENT, PLAY SAFETY SURFACING, AND PLAY SAFETY SURFACING EDGING WITH PLAYGROUND CONTRACTOR PRIOR TO ANY EXCAVATION OR PAVING INSTALLATION.

# BARRIER-FREE NOTES

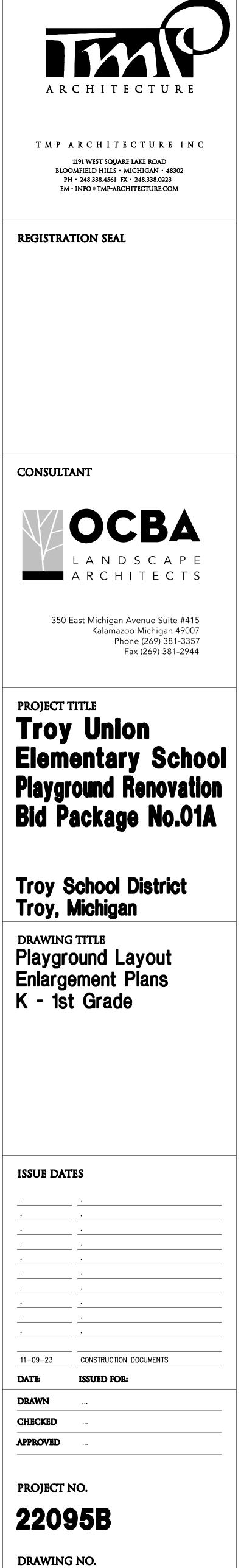
BARRIER-FREE PARKING AND ACCESSIBLE ROUTE(S) MUST COMPLY WITH THE AMERICANS WITH DISABILITIES ACT AND MICHIGAN BARRIER-FREE CODE REQUIREMENTS, INCLUDING BUT NOT LIMITED TO THE FOLLOWING:

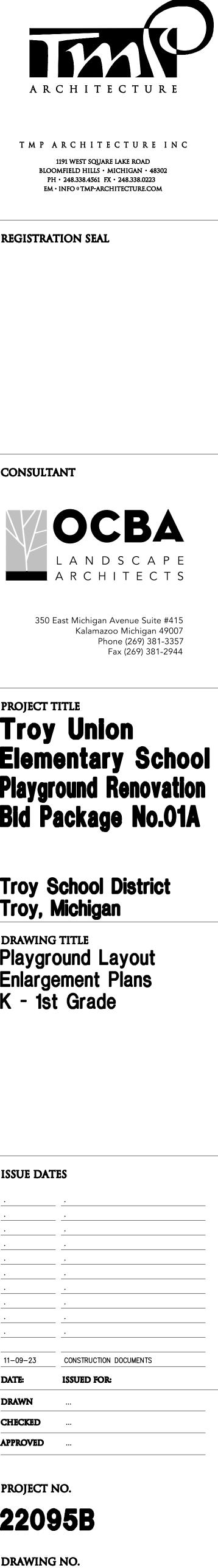
- 1:50 (2%) MAXIMUM CROSS-SLOPE ON ACCESSIBLE ROUTE. - NO CHANGES IN LEVEL GREATER THAN 1/2" ALONG ACCESSIBLE ROUTE.
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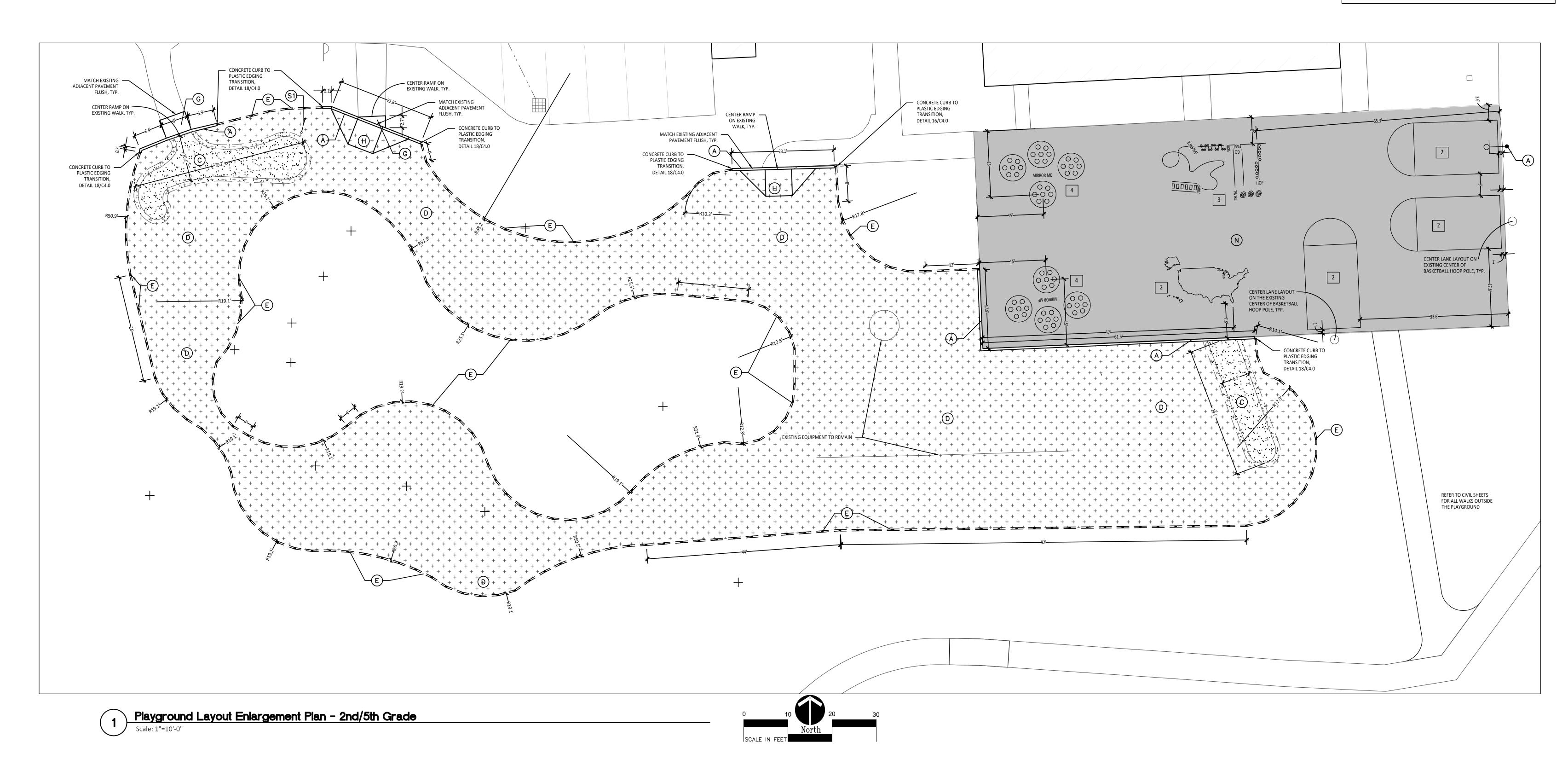








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### LAYOUT NOTES:

EXISTING CONDITIONS SURVEY PROVIDED BY PEA GROUP, 1849 POND RUN, AUBURN HILLS, MICHIGAN, 48326, (248)689-9090.

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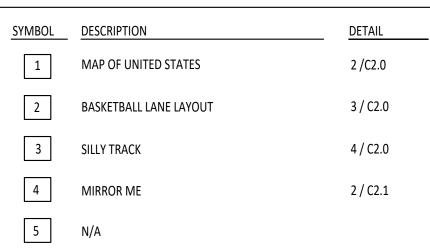
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NOTE: VERIFY LOCATION OF NEW PLAYGROUND EQUIPMENT PRIOR TO INSTALLATION OF ANY CONCRETE CURB. CONCRETE CURB TO BE INSTALLED OUTSIDE OF FALL SAFETY ZONE OF EACH PIECE OF EQUIPMENT PER ASTM 1487-05 AND MANUFACTURER'S WRITTEN RECOMMENDATIONS.

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SYMBOL DESCRIPTION	KEY	DESCRIPTION	DETAIL
·	(A)	STRAIGHT FACE CONCRETE CURB	6 /C4.0
RESILIENT SURFACING (BY OTHERS)	B	THICKENED EDGE CONCRETE	11 /C4.0
	Č	RESILIENT SURFACING (BY OTHERS)	7 /C4.0
+ + + + +	D	LOOSE FILL SAFETY SURFACING (BY OTHERS)	3 & 9 /C4.0
+ $+$ $+$ $+$ $+$ $+$ $+$ LOOSE FILL SAFETY SURFACING (BY OTHERS)	Ē	PLASTIC PLAY EDGING (BY OTHERS)	12, 13, & 18 /C4
+ $+$ $+$ $+$ $+$	F	N/A	
	Ğ	CONCRETE WALK	2 /C4.0
► N/A	H	PLAY AREA ENTRANCE RAMP	16 /C4.0
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	K	BASKETBALL HOOP POLE (BY OTHERS)	17 /C4.0
N         BITUMINOUS SEALCOATING		SOCCER GOALS	SEE SPECS.
	M	N/A	
PLAY SAND	$(\widetilde{N})$	BITUMINOUS SEALCOATING	SEE SPECS
	P	PLAY SAND	SEE SPECS
= = = = 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	SIGNS	À	
- × × × - CHAIN LINK FENCE	<u>(S1)</u>	COMMUNICATION BOARD	10 / C4.0

# 2ND + 5TH GRADE PAINTED GAMES SCHEDULE:





11-09-

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DRAWING NO. C2.2



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#### **ISSUE DATES**

Troy School District Troy, Michigan DRAWING TITLE Playground Layout Enlargement Plans 2nd - 5th Grade

# PROJECT TITLE **Troy Union Elementary School Playground Renovation Bid Package No.01A**



Phone (269) 381-3357 Fax (269) 381-2944

CONSULTANT



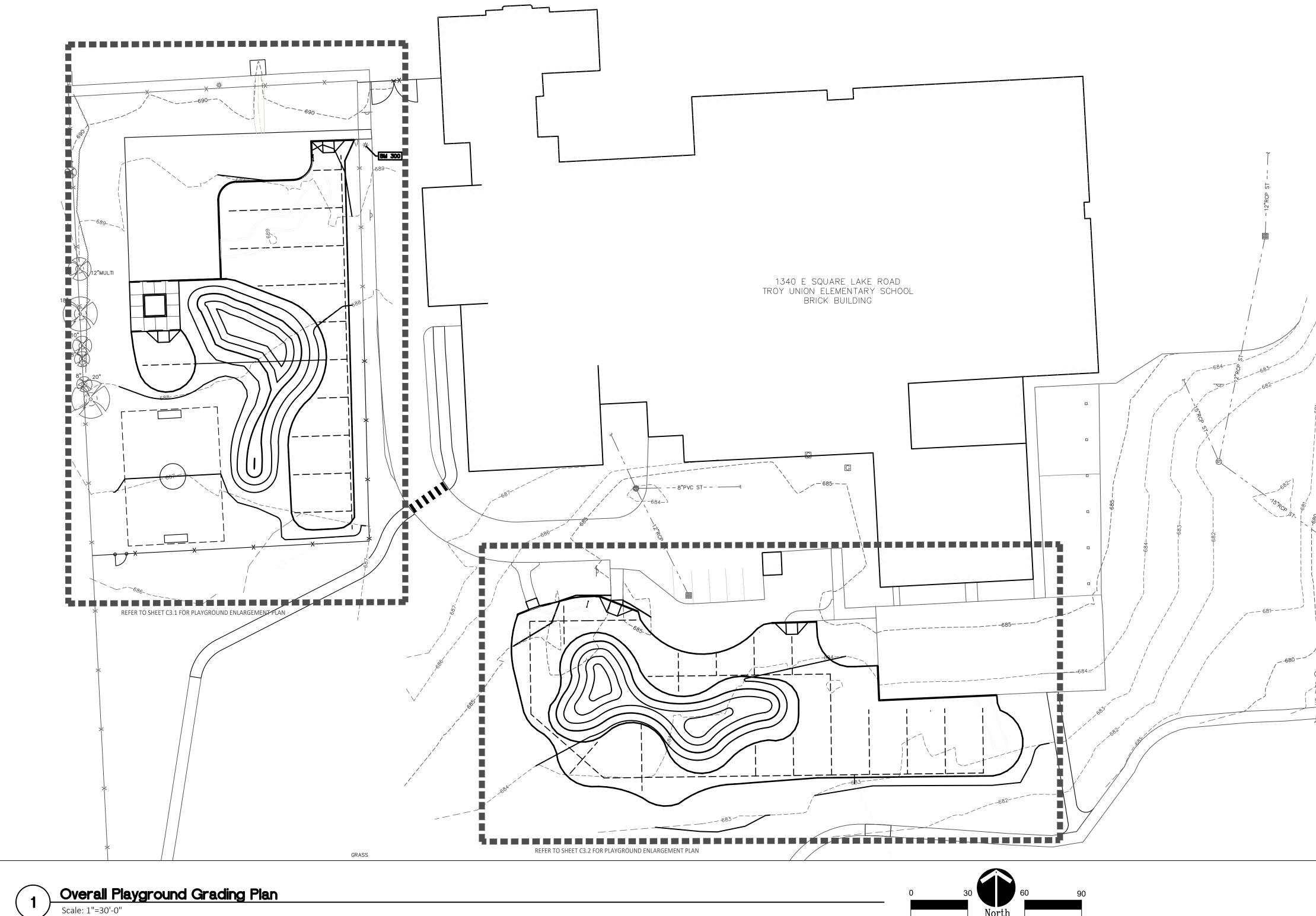
PH • 248.338.4561 FX • 248.338.0223 EM • INFO @ TMP-ARCHITECTURE.COM **REGISTRATION SEAL** 

ARCHITECTURE

TMP ARCHITECTURE INC

1191 WEST SQUARE LAKE ROAD

BLOOMFIELD HILLS • MICHIGAN • 48302

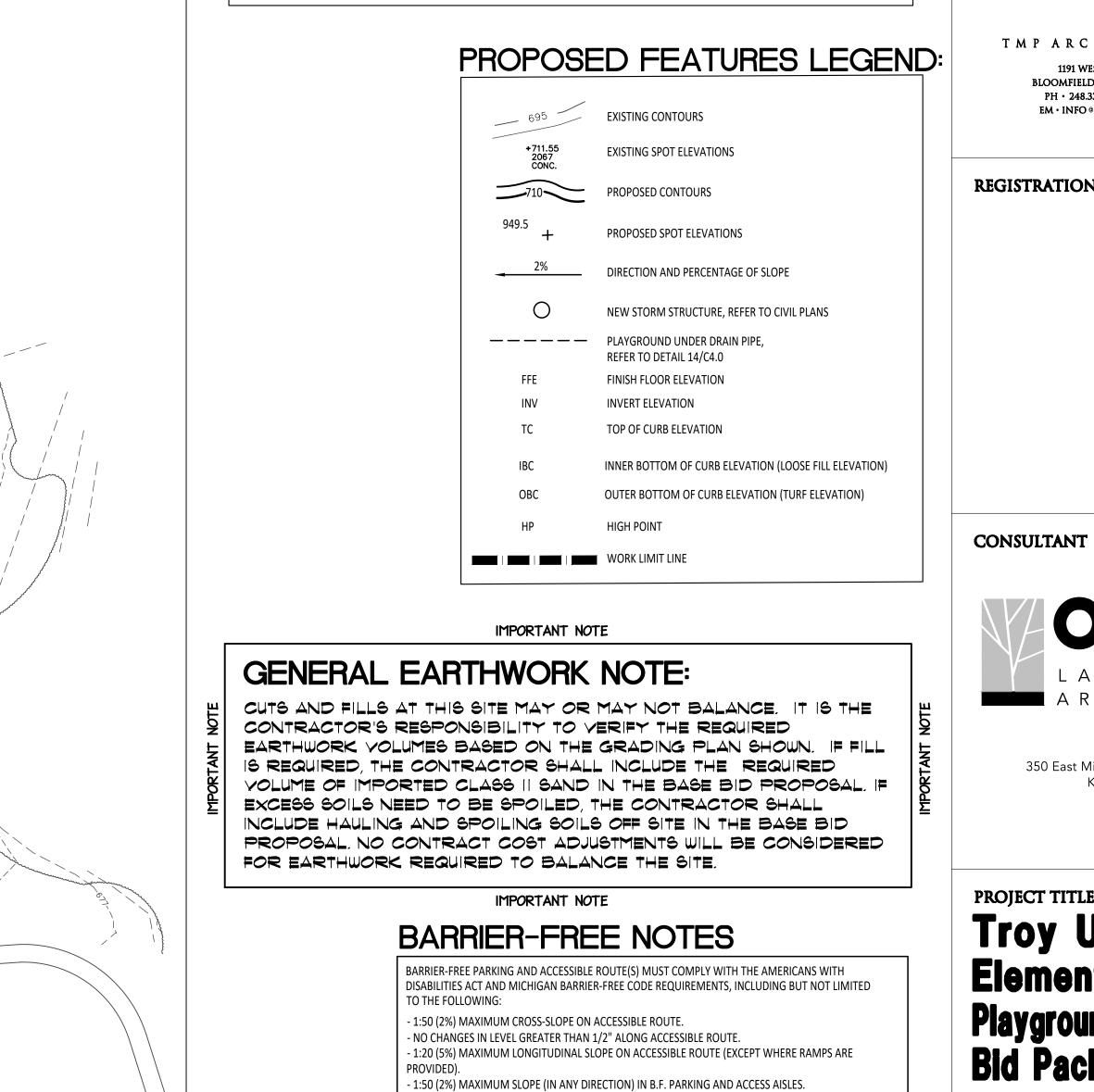


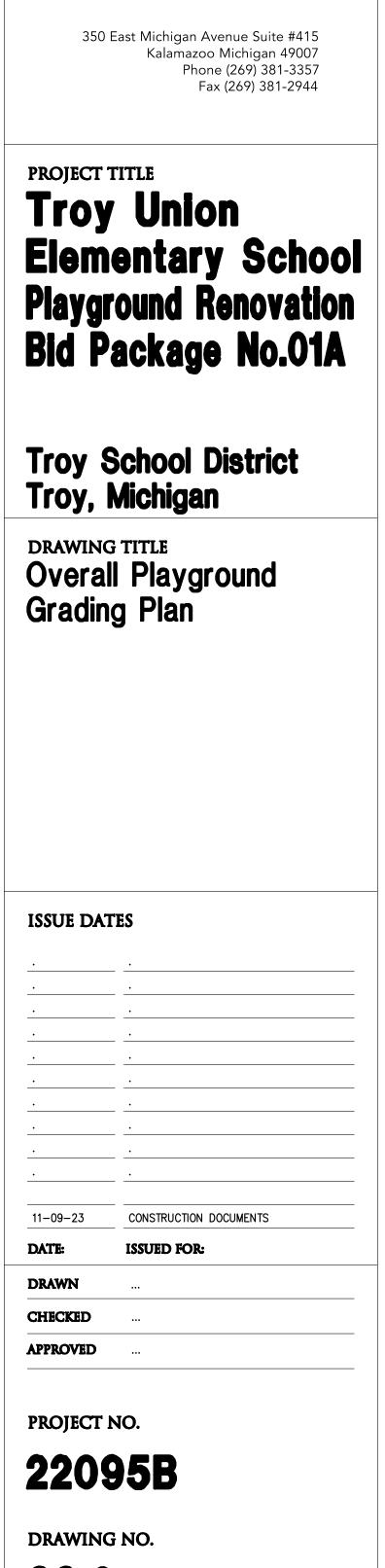
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# **GRADING NOTES**:

- SURVEY OF EXISTING CONDITIONS PROVIDED BY PEA GROUP, 1849 POND RUN, AUBURN HILLS, MICHIGAN, 48326, (248)689-9090.
- VERIFY LOCATIONS OF ALL BELOW GRADE UTILITIES PRIOR TO BEGINNING WORK. 72 HOURS BEFORE YOU DIG CALL "MISS DIG" AT 1-800-482-7171.
- ALL NEW PAVEMENTS AND TURF AREAS ARE INTENDED TO DRAIN FREELY WITH NO PONDING. IF THIS CANNOT BE ACHIEVED USING
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- ADJUST TOP OF EXISTING MANHOLES, CATCH BASINS, VAULT COVERS, ETC. TO NEW FINISH GRADE AS REQUIRED.
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LANDSCAPE

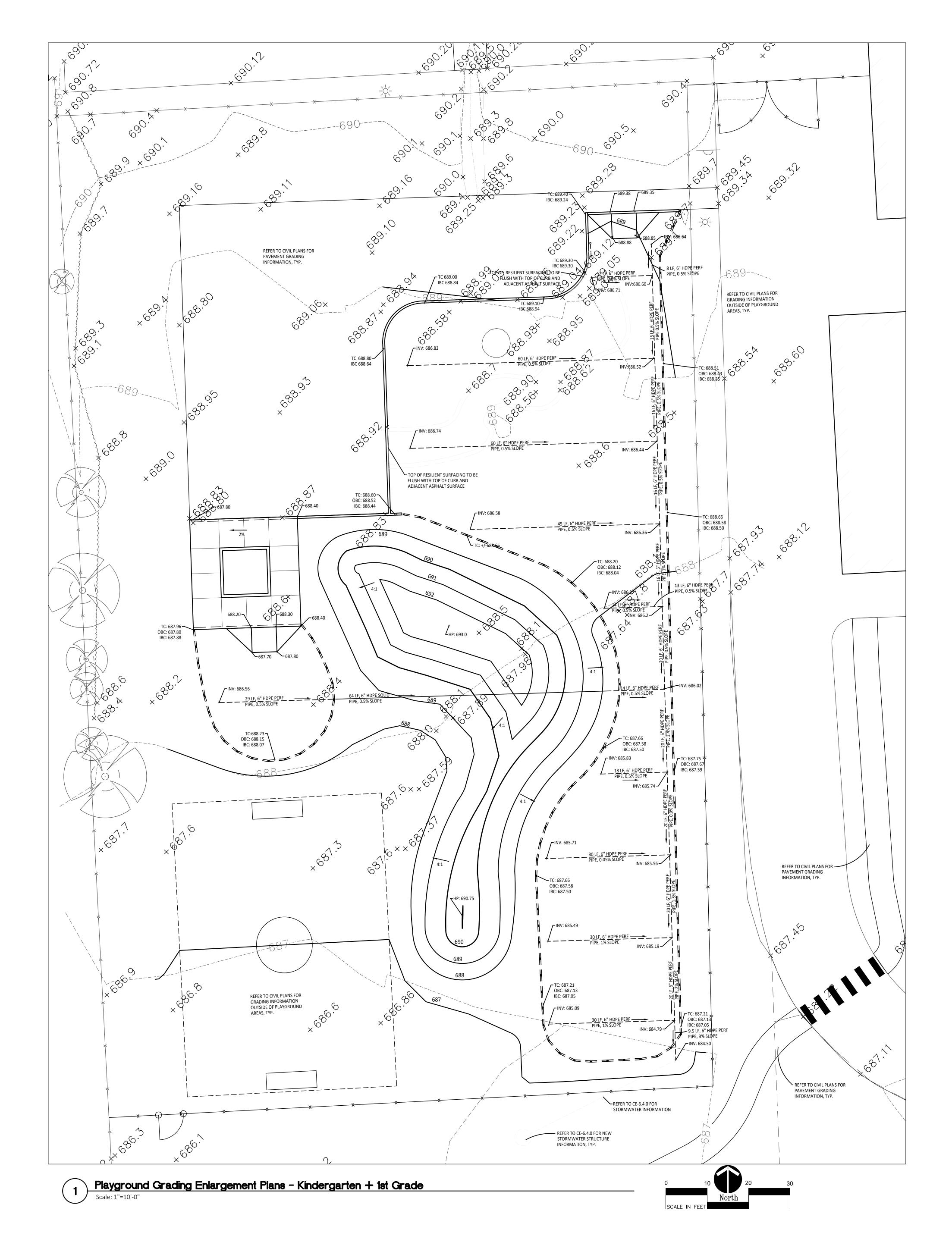
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**REGISTRATION SEAL** 

ARCHITECTURE

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## PROPOSED FEATURES LEGEND:

695	EXISTING CONTOURS
+711.55 2067 CONC.	EXISTING SPOT ELEVATIONS
710	PROPOSED CONTOURS
949.5	PROPOSED SPOT ELEVATIONS
2%	DIRECTION AND PERCENTAGE OF SLOPE
0	NEW STORMWATER STRUCTURE, REFER TO CIVIL PLANS
	PLAYGROUND UNDER DRAIN PIPE, REFER TO DETAIL 14/C4.0
FFE	FINISH FLOOR ELEVATION
INV	INVERT ELEVATION
тс	TOP OF CURB ELEVATION
IBC	INNER BOTTOM OF CURB ELEVATION (LOOSE FILL ELEVATION)
OBC	OUTER BOTTOM OF CURB ELEVATION (TURF ELEVATION)
HP	HIGH POINT
	WORK LIMIT LINE

IMPORTANT NOTE

## GENERAL EARTHWORK NOTE:

CUTS AND FILLS AT THIS SITE MAY OR MAY NOT BALANCE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE REQUIRED EARTHWORK VOLUMES BASED ON THE GRADING PLAN SHOWN, IF FILL IS REQUIRED, THE CONTRACTOR SHALL INCLUDE THE REQUIRED VOLUME OF IMPORTED CLASS II SAND IN THE BASE BID PROPOSAL. IF EXCESS SOILS NEED TO BE SPOILED, THE CONTRACTOR SHALL INCLUDE HAULING AND SPOILING SOILS OFF SITE IN THE BASE BID PROPOSAL, NO CONTRACT COST ADJUSTMENTS WILL BE CONSIDERED FOR EARTHWORK REQUIRED TO BALANCE THE SITE.

IMPORTANT NOTE

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# PROJECT TITLE **Troy Union Elementary School Playground Renovation Bid Package No.01A**

ARCHITECTS 350 East Michigan Avenue Suite #415

Kalamazoo Michigan 49007

Phone (269) 381-3357

Fax (269) 381-2944

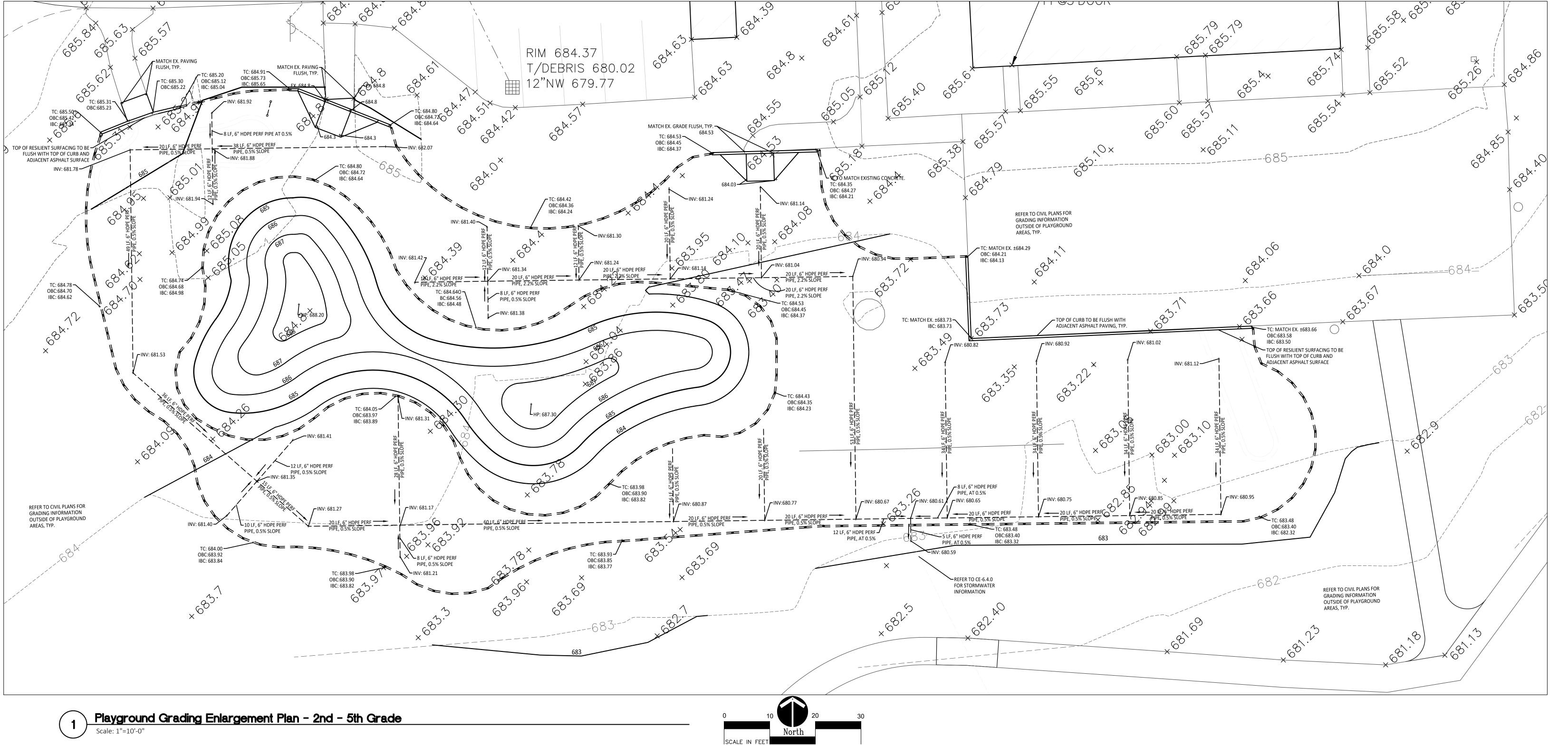
CONSULTANT



1191 WEST SQUARE LAKE ROAD BLOOMFIELD HILLS • MICHIGAN • 48302 PH • 248.338.4561 FX • 248.338.0223 EM · INFO @ TMP-ARCHITECTURE.COM **REGISTRATION SEAL** 

ARCHITECTURE

TMP ARCHITECTURE INC



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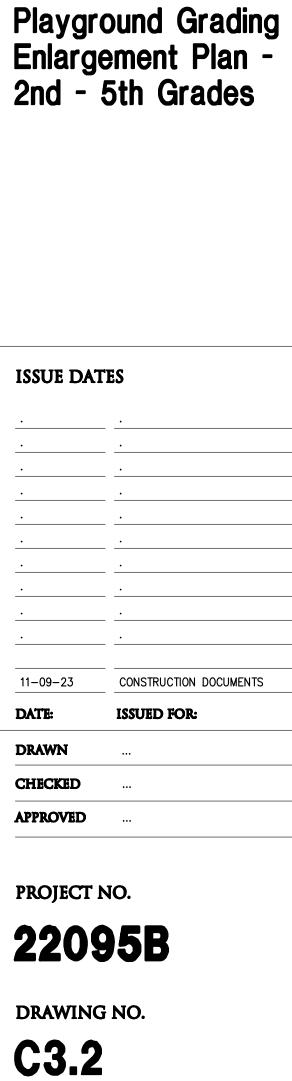
IMPORTANT NOTE

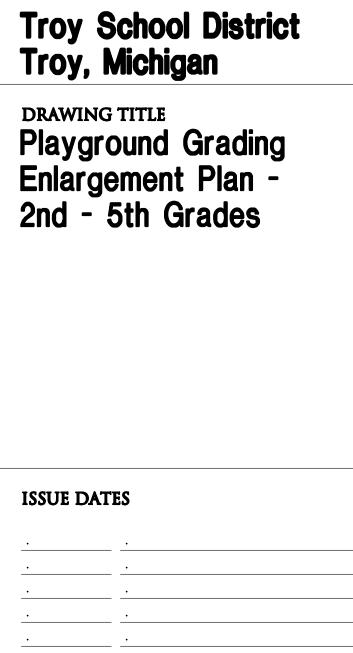
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	WORK LIMIT LINE





# PROJECT TITLE **Troy Union Elementary School** Playground Renovation Bid Package No.01A



350 East Michigan Avenue Suite #415

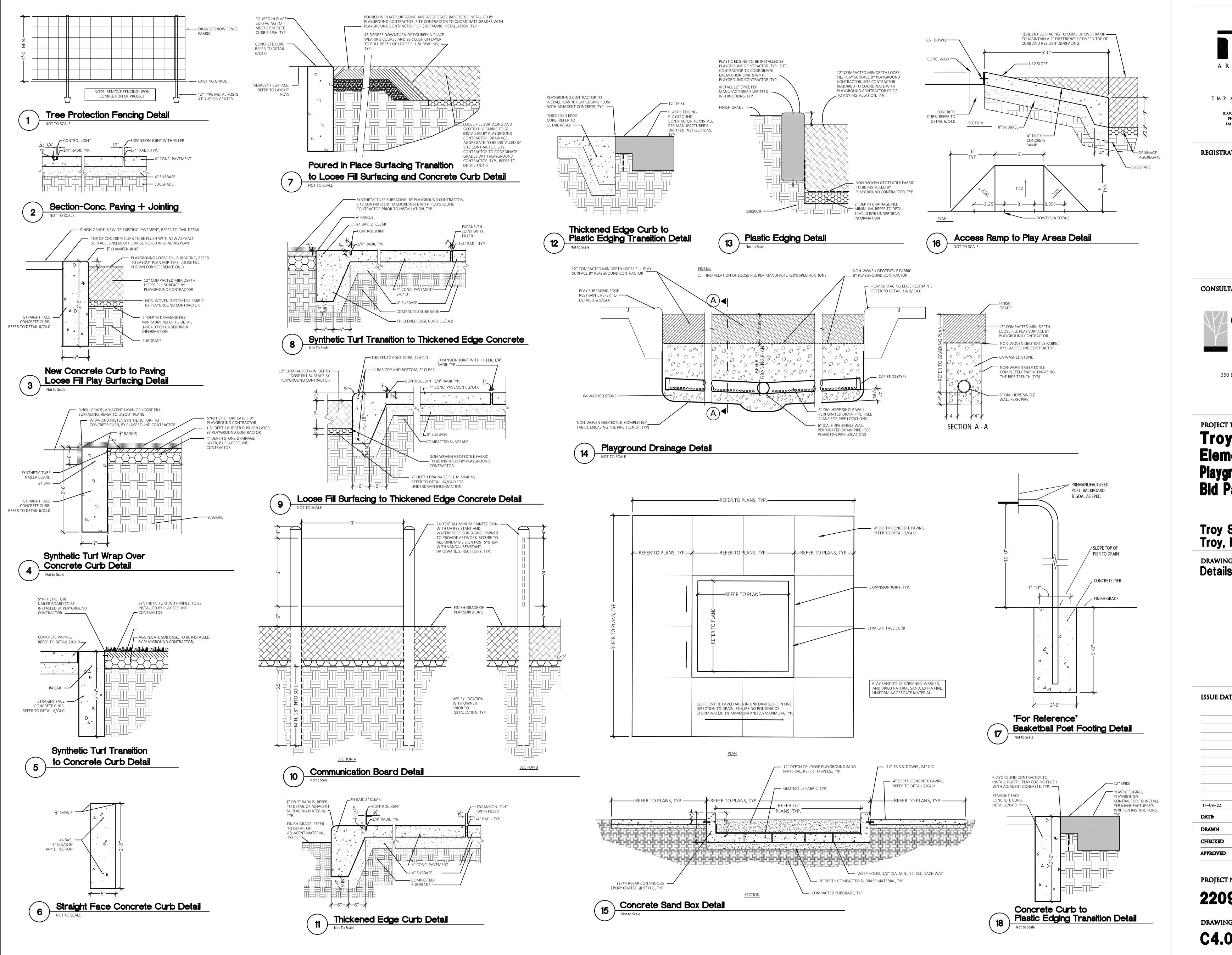
Kalamazoo Michigan 49007 Phone (269) 381-3357 Fax (269) 381-2944

CONSULTANT

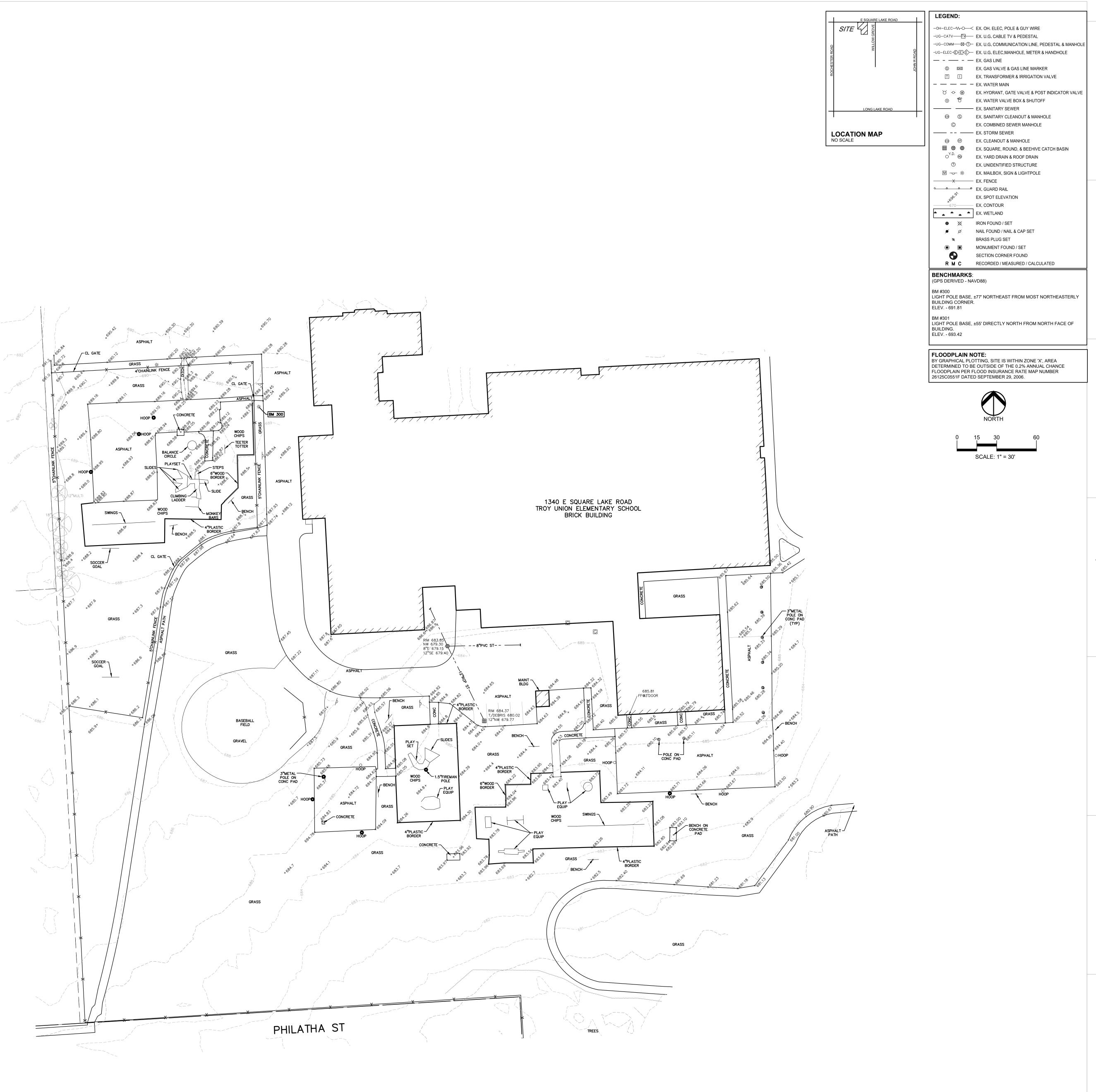
**REGISTRATION SEAL** 

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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ARCHITECTURE INC	
1191 WEST SQUARE LAKE ROAD OMFIELD HILLS · MICHIGAN · 48302	
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ARCHITECTS	
East Michigan Avenue Suite #415 Kalamazoo Michigan 49007 Phone (269) 381-3357	
Fax (269) 381-2944	
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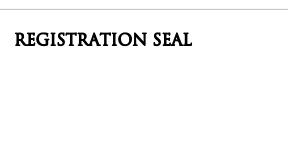
Troy School District Troy, Michigan DRAWING TITLE Topographic Survey

1340 E SQUARE LAKE ROAD Playground Renovation Bid Package No.01A

PROJECT TITLE **Troy Union Elementary School** 1340 E SOLLARE LAKE ROAD

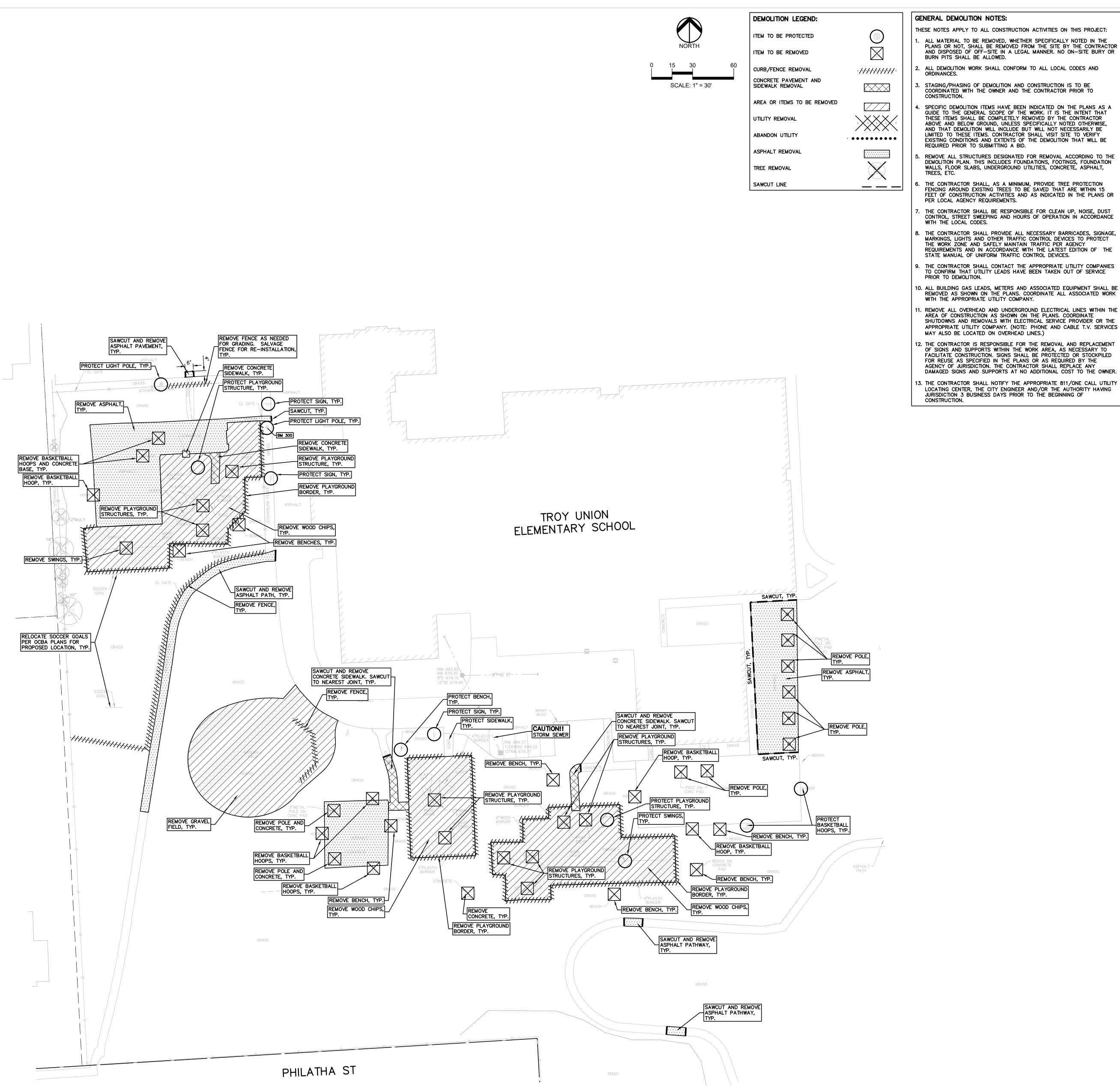


CONSULTANT



TMPARCHITECTURE INC 1191 West Square Lake Road Bloomfield Hills • Michigan • 48302 PH • 248.338.4561 FX • 248.338.0223 EM • INFO ® TMP-ARCHITECTURE.COM









ISSUE DATES						
11-9-2023	CONSTRUCTION DOCUMENTS					
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**Troy School District** 

# 1340 E SQUARE LAKE ROAD **Playground Renovation** Bid Package No.01A

PROJECT TITLE **Troy Union Elementary School** 





CONSULTANT

**REGISTRATION SEAL** 

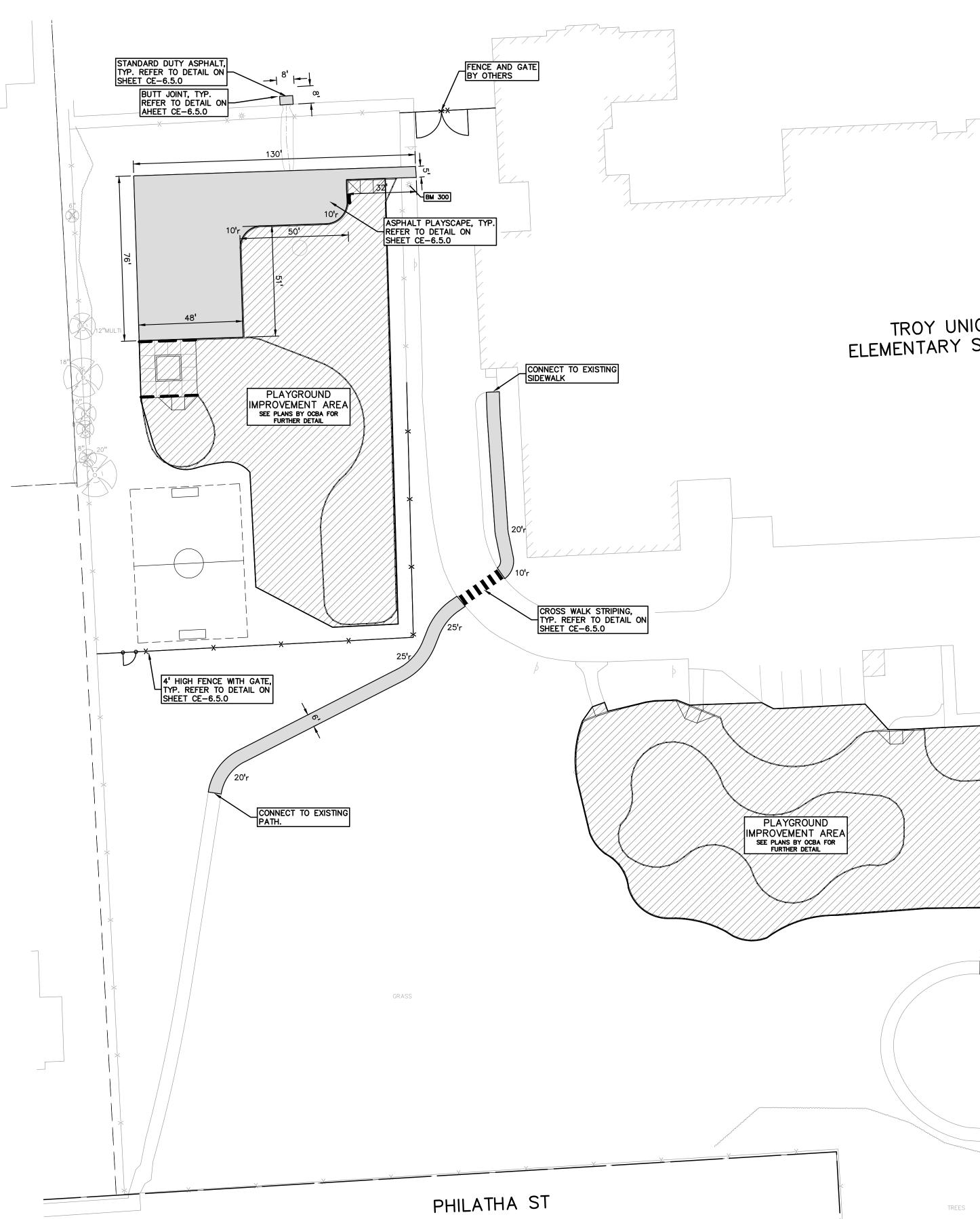
ARCHITECTURI TMP ARCHITECTURE INC 1191 WEST SQUARE LAKE ROAD

BLOOMFIELD HILLS • MICHIGAN • 48302

EM • INFO @ TMP-ARCHITECTURE.COM

PH • 248.338.4561 FX • 248.338.0223





	LEGEND:         Image: Stop HEAVY ROW.         DUTY DUTY ONLY         CONCRETE PAVEMENT         STO HEAVY DEEP         DUTY DUTY STRENGTH         Image: Stop HEAVY DEEP         GRAVEL         Image: Stop HEAVY STRENGTH         Image: Stop HEAVY STRENGTH <th></th>	
$     \begin{array}{c}                                     $	<ul> <li>NOTES:</li> <li>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.</li> <li>2. ALL DIMENSIONS SHOWN ARE TO BACK OF CURB, FACE OF SIDEWALK, CENTER OF MANHOLE/CATCH BASIN UNLESS OTHERWISE NOTED.</li> <li>3. DOWEL INTO EXISTING CURB AND GUTTER 9" WITH EPOXY COATED #4 BAR CONTINUOUS BETWEEN EXISTING AND PROPOSED CURBING.</li> <li>4. REFER TO NOTES AND DETAILS SHEET FOR PAVING DETAILS.</li> <li>5. CONTRACTOR TO FIELD VERIFY ALL UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION INCLUDING BUT NOT LIMITED TO: SITE LIGHTING, FIBER LINES, ETC.</li> <li>6. CONTRACTOR TO REMOVE AND REPLACE SIGNS AND 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.</li> <li>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 RUSCH BASED ON THE ACTUAL DEPTH OF REPAIRING EACH STRUCTURAL ADJUSTMENT (MITHIN TOP 12-INCHES OF RIM ELEVATION) OR STRUCTURAL RECONSTRUCTION (GREATER THAN 12-INCHES IN DEPTH) FROM THE ITHER STRUCTURAL ADJUSTMENT (MITHIN TOP 12-INCHES OF RIM ELEVATION) OR STRUCTURAL RECONSTRUCTION (GREATER THAN 12-INCHES IN DEPTH) FROM THE ITHER STRUCTURAL ADJUSTMENT (MITHIN TOP 12-INCHES OF RIM ELEVATION) OR STRUCTURAL RECONSTRUCTION (GREATER THAN 12-INCHES IN DEPTH) PER THE UNIT PRICES PROVIDED IN THE UNIT PRICE FOR BOTH STRUCTURAL ADJUSTMENT AND APPROVED PRIOR TO THE WORK COMMENCING, REPLASTERING OF THE ENTRE STRUCTURE BASED ON THE ACTUAL DEPTH OF REPAIR WITH EITHER STRUCTURAL ADJUSTMENT AND STRUCTURAL RECONSTRUCTION.</li> </ul>	P
ION SCHOOL	<ul> <li>SUBGRADE UNDERCUTTING NOTES:</li> <li>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, ADDITONALLY, THE SUBGRADE MAY BECOME UNSTABLE UNDER REPEATED LOADING OF CONSTRUCTION TRAFFIC; THEREFORE, CONSTRUCTION EQUIPMENT SHOULD BE LIMITED ON THE EXPOSED SUBGRADE.</li> <li>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 TH-AXIAL GEORID MAY BE USED TO REDUCE UNDERCUT DEPTHS, AS APPROVED BY THE DISTRICT AND PER THE UNIT PRICE PROVIDED WITH THE CONTRACTORS BID.</li> <li>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.</li> <li>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 NOT BE USED AS FILL, NOR SHOULD FILL BE PLACED ON A FROZEN SUBGRADE.</li> <li>5. SUBGRADE UNDERCUT DRAIN TILE SHALL BE EVALUATED BY A QUALIFIED ENGINEERING TECHNICIAN TO DETERMINE IF SUBGRADE STABILIZATION IS NECESSARY. DRAIN TILE SHALL BE FLACED WITHIN ANY UNDERCUT DRAIN TILE SHALL BE EVALUATED BY A QUALIFIED ENGINEERING TECHNICIAN TO DETERMINE IF SUBGRADE STABILIZATION IS NECESSARY. DRAIN TILE SHALL BE FLACED 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 COHESTIVE SOILS.</li> <li>6. THE QUANTITY FOR 'SUBGRADE UNDERCUT DRAIN TILE (4")' FOR EACH SITE SHALL BE</li></ul>	
B CONNECT TO EXISTING PATH. B <sup>1</sup> WDE ASPHALT PATHWAY THP: REFER TO DETAIL ON SHEET CE-6.5.0 TYP: REFER TO DETAIL ON SHEET CE-6.5.0		





ISSUE DAT	TES
11-9-2023	CONSTRUCTION DOCUMENTS
DATE:	ISSUED FOR:
DRAWN	WR
CHECKED	RR
APPROVED	TD

Troy School District Troy, Michigan DRAWING TITLE
Dimension & Paving Plan

Elementary School 1340 E SQUARE LAKE ROAD Playground Renovation Bid Package No.01A

PROJECT TITLE
Troy Union

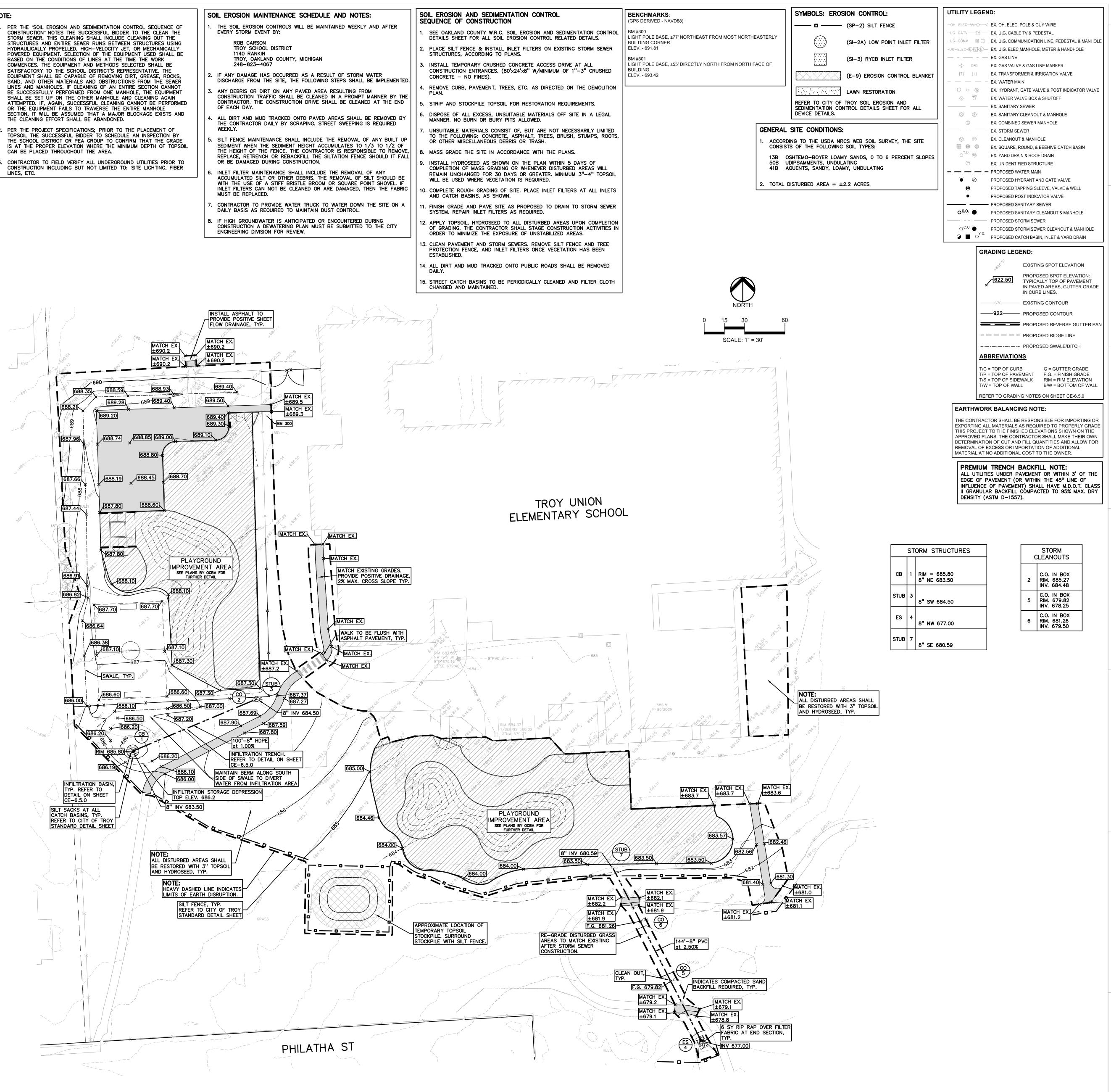
 $P \equiv \Lambda$ GROUP t: 844.813.2949 www.peagroup.com

CONSULTANT

**REGISTRATION SEAL** 



SEQUE	NCE	OF CONSTRUCTION:	NOT	E:
START DAY 1	END DAY 2		1.	PER THE "S CONSTRUCT STORM SEV STRUCTURE
1	90	MAINTAIN A 25' BUFFER OF VEGETATION AROUND PERIMETER OF SITE WHERE POSSIBLE.		HYDRAULIC POWERED E
1	5	STRIP AND STOCKPILE TOPSOIL AS REQUIRED RESTORATION. ALL STOCKPILES MUST BE GRADED AND SEEDED.		BASED ON COMMENCE SATISFACTO
5	15	REMOVE ALL PAVEMENT, CURB, UTILITIES, ETC. AS REQUIRED TO INSTALL THE PROPOSED WORK AS SHOWN ON THE TOPOGRAPHIC SURVEY AND DEMOLITION PLAN.		EQUIPMENT SAND, AND LINES AND
10	15	DISPOSE OF ALL EXCESS/UNSUITABLE MATERIALS OFF SITE IN A LEGAL MANNER. NO ON-SITE BURN OR BURY PITS ALLOWED.		BE SUCCES SHALL BE ATTEMPTED
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.		OR THE EC SECTION, I THE CLEAN
15	90	TEMPORARY SEEDING MUST BE PROVIDED IN AREAS NOT TO BE WORKED ON FOR 15 DAYS OR LONGER.	2.	PER THE P TOPSOIL TH
40	50	FINE GRADE SITE AND PREPARE FOR SITE PAVING OPERATIONS.		THE SCHOO
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.	3.	CAN BE PL CONTRACTO CONSTRUCT LINES, ETC
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.		







ISSUE DAT	ES		
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**Troy School District** Troy, Michigan DRAWING TITLE Grading, Utility & Soil **Erosion Control Plan** 

**Playground Renovation Bid Package No.01A** 

PROJECT TITLE **Troy Union Elementary School** 1340 E SQUARE LAKE ROAD

GROUP t: 844.813.2949 www.peagroup.com

CONSULTANT

**REGISTRATION SEAL** 





GE	NERAL NOTES:
THE	ESE 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.
PA	VING NOTES:
1.	IN AREAS WHERE NEW PAVEMENTS ARE BEING CONSTRUCTED, THE TOPSOIL AND SOIL CONTAINING ORGANIC MATTER SHALL BE REMOVED PRIOR TO PAVEMENT CONSTRUCTION.
1	

- 2. REFER TO ARCHITECTURAL PLANS FOR DETAILS OF FROST SLAB AT EXTERIOR BUILDING DOORS.
- CONSTRUCTION TRAFFIC SHOULD BE MINIMIZED ON THE NEW PAVEMENT. 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 THE ENGINEER PRIOR TO COMMENCING WORK AND VIA THE SUBMITTAL PROCESS. WHERE PROPOSED CONCRETE ABUTS EXISTING OR 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. 5. 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 PROPOSÉD 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

- 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'
- 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 CONTRACTOR SHALL FIELD VERIFY ALL EXISTING TREES AND BRUSH AND REMOVE ALL THAT ARE NECESSARY TO GRADE SITE.
- ALL GRADES ARE TO TOP OF PAVEMENT UNLESS OTHERWISE NOTED. 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. ALL SOIL EROSION AND SEDIMENTATION CONTROL MEASURES IS SHALL MEET
- THE REQUIREMENTS OF THE AUTHORIZED PUBLIC AGENCY OF JURISDICTION. ALL EARTHWORK AND GRADING OPERATIONS SHALL BE PERFORMED IN
- ACCORDANCE WITH THE PLANS AND SPECIFIACTIONS.
- REFER TO SOIL EROSION CONTROL PLAN FOR ADDITIONAL SOIL EROSION AND SEDIMENTATION CONTROL MEASURES AND NOTES. ALL LANDSCAPING IS TO BE COMPLETED BY STALLANTIS.
- 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 SOF UNSTABLE OR UNSUITABLE BACKFILL MATERIAL, IN THE OPINION OF T 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.
- 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.
- D. 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.
- . 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.
- SUBGRADE UNDERCUTTING, INCLUDING BACKFILLING SHALL BE PERFORMED TO REPLACE MATERIALS SUSCEPTIBLE TO 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. 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
- 4. 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.

- SOIL EROSION AND SEDIMENTATION CONTROL MEASURES
- 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 STORM SEWER STRUCTURES
- STORM SEWER STRUCTURE FRAME AND COVERS INCLUDING CLEAN OUTS 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 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
- PAVEMENT MIX DESIGNS SUBMITTED FOR REVIEW BY THE ENGINEER MUST FOLLOW THE CURRENT MOOT 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)
- SITE FENCING AND GATES
- 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:

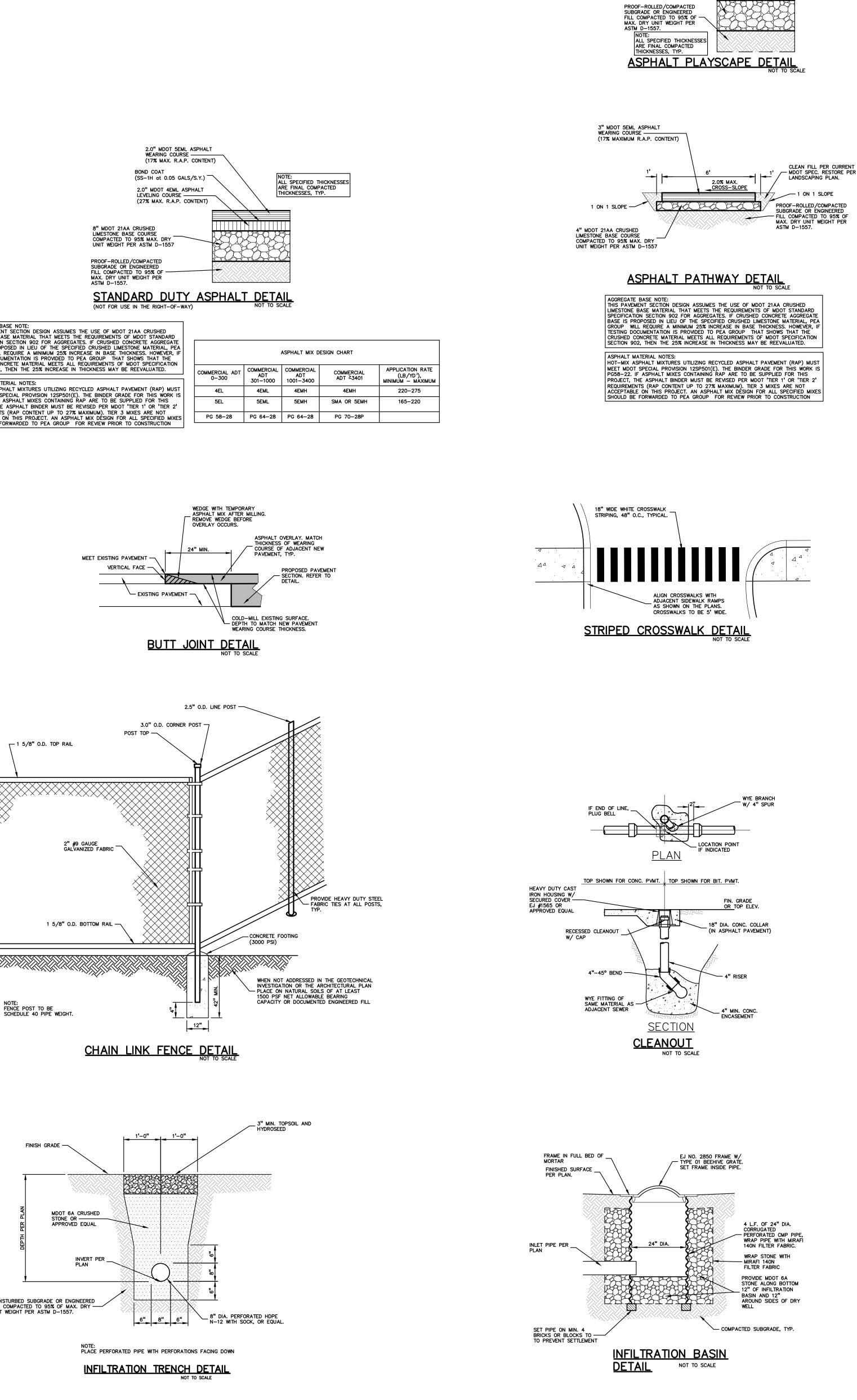
- ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS OF THE CITY OF TROY.
- ALL TRENCHES UNDER OR WITHIN THREE (3) FEET OR THE FORTY-FIVE (45) DEGREE ZONE OF INFLUENCE LINE OF EXISTING AND/OR PROPOSED PAVEMENT, BUILDING PAD OR DRIVE APPROACH SHALL BE BACKFILLED 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 BETTÉR.
- 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.
- 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.
- 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.
- PIPE LENGTHS INDICATED ARE FROM CENTER OF STRUCTURE AND TO END OF SECTION UNLESS NOTED OTHERWISE.
- 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:
- ALL STORM SEWER LEADS SHALL BE CONSTRUCTED AT 1.00% MINIMUM
- ALL STORM SEWER 10" OR LESS AND/OR LEADS SHALL BE SDR 26. JOINTS FOR P.V.C. PIPE SHALL BE ELASTOMERIC (RUBBER GASKET) AS

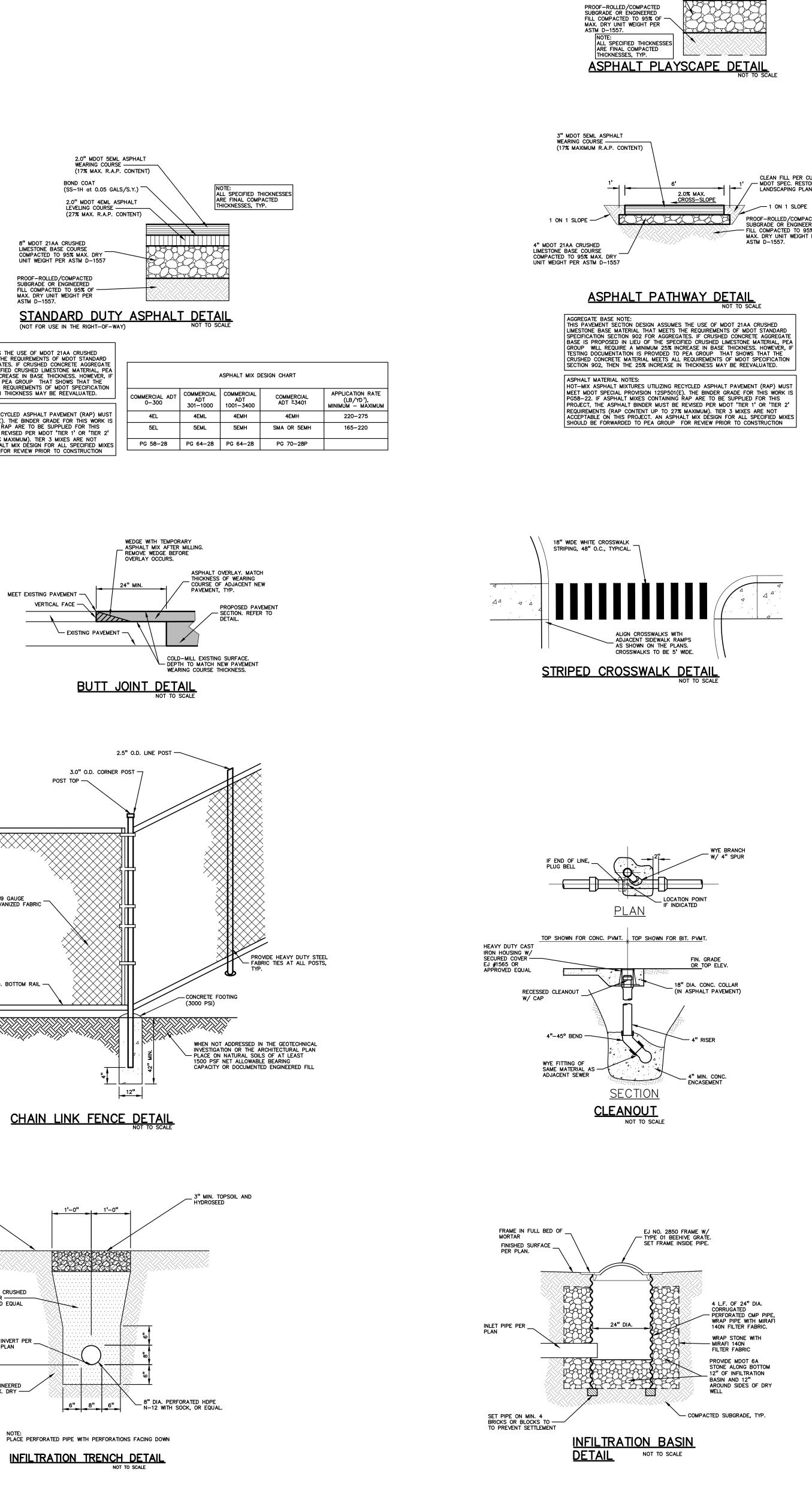
### GENERAL BARRIER FREE NOTES:

SPECIFIED IN A.S.T.M. DESIGNATION D-3212.

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. THE CONTRACTOR IS RESPONSIBLE FOR ALL OF THE REQUIREMENTS PRESENTED WITHIN THESE DOCUMENTS, WHICH ARE AVAILABLE IN FULL UPON REQUEST.

- 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.
- HE RUNNING SLOPE OF ALL WALKING SURFACES SHALL NOT EXCEED 5% (1:20) AND THE CROSS-SLOPE SHALL NOT EXCEED 2% (1:48). 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. 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. ACCESSIBLE ROUTES WILL BE DESIGNED TO BE A MINIMUM OF 5 FEET WIDE. THE MINIMUM CLEAR WIDTH IS 3 FEET RAMPS ALONG ACCESSIBLE ROUTES WILL HAVE A RUNNING SLOPE GREATER
- THAN 5% (1:20) AND LESS THAN 8.3% (1:12). THE CROSS-SLOPE OF RAMP RUNS SHALL NOT EXCEED 2% (1:48) 8. THE MINIMUM CLEAR WIDTH OF ANY RAMP IS 36 INCHES. 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 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. 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. 3. CURB RAMPS SHALL BE LOCATED OR PROTECTED TO PREVENT THEIR
- OBSTRUCTION BY PARKED VEHICLES. 4. 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. FOR EVERY SIX OR FRACTION OF SIX ACCESSIBLE PARKING SPACES, ONE VAN ACCESSIBLE SPACE SHALL BE PROVIDED. 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 . 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 & 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.



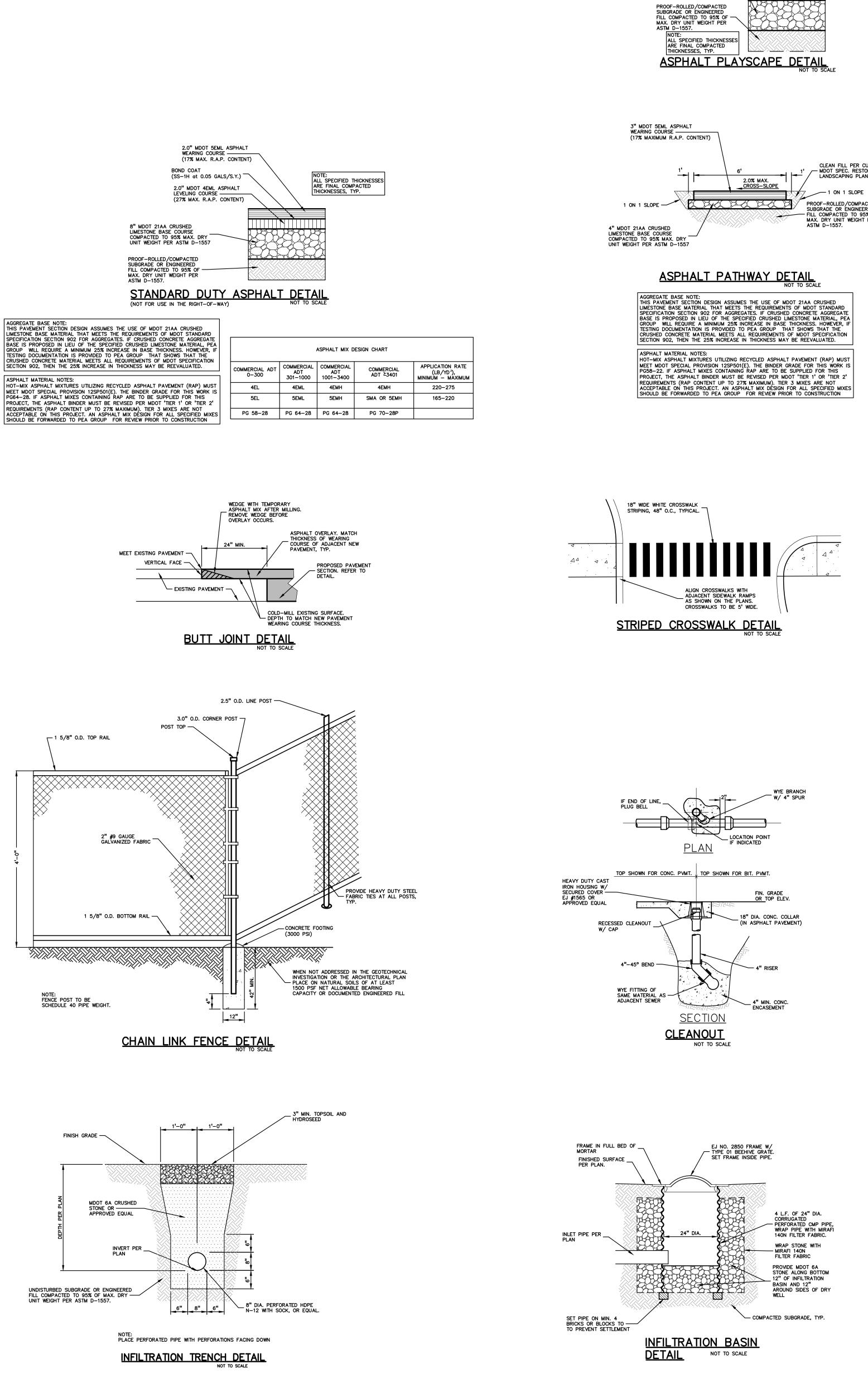


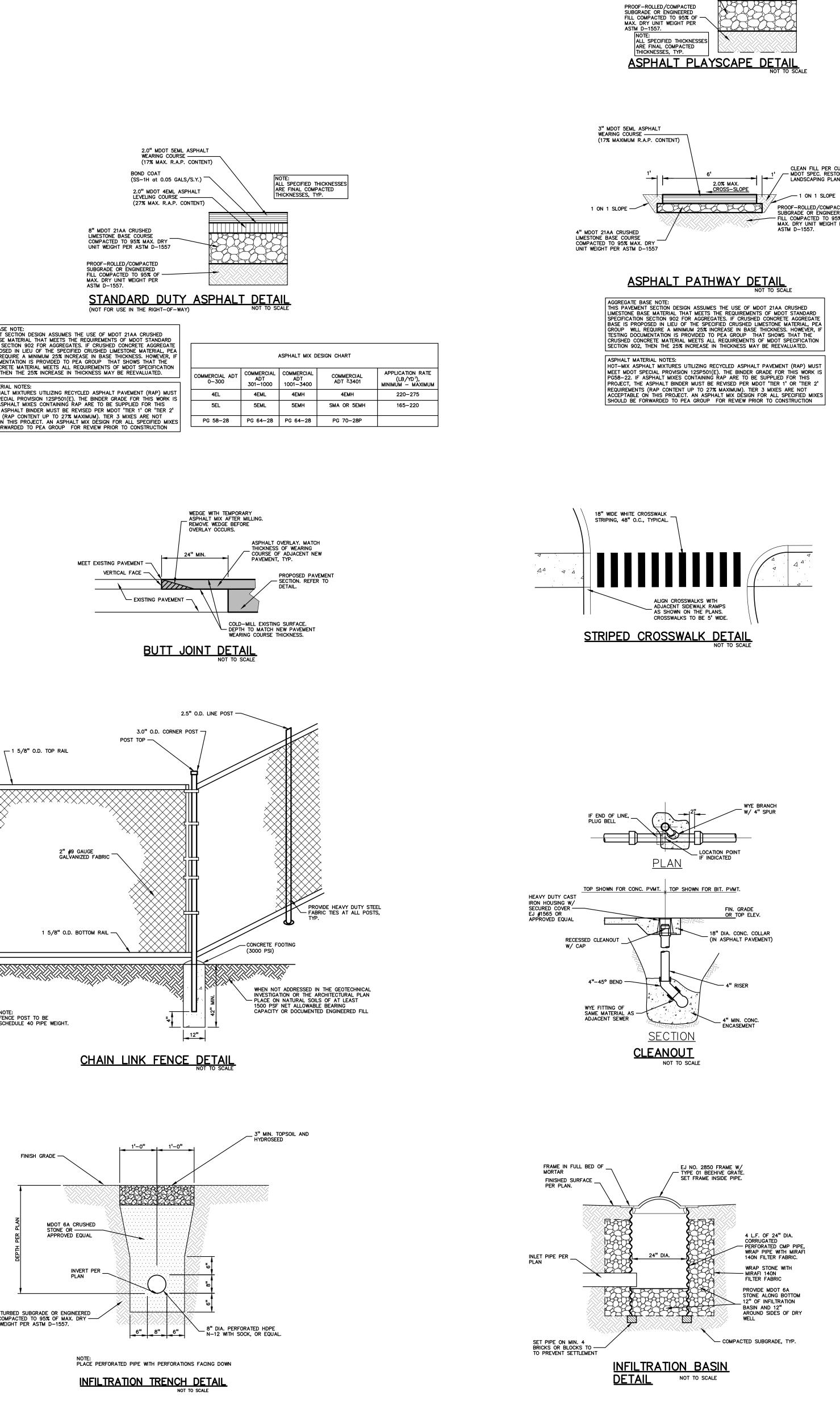
3" MDOT 5EML ASPHALT WEARING COURSE -------

(17% MAX. R.A.P. CONTENT)

COMPACTED TO 95% MAX. DRY UNIT WEIGHT PER ASTM D-1557

6" MDOT 21AA CRUSHED LIMESTONE BASE COURSE







**CE-6.5.0** 

DRAWING NO.

11-9-2023	CONSTRUCTION DOCUMENTS
DATE:	ISSUED FOR:
DRAWN	WR
CHECKED	RR

**ISSUE DATES** 

Troy, Michigan DRAWING TITLE Notes & Details

**Bid Package No.01A Troy School District** 

**Playground Renovation** 

PROJECT TITLE **Troy Union Elementary School** 

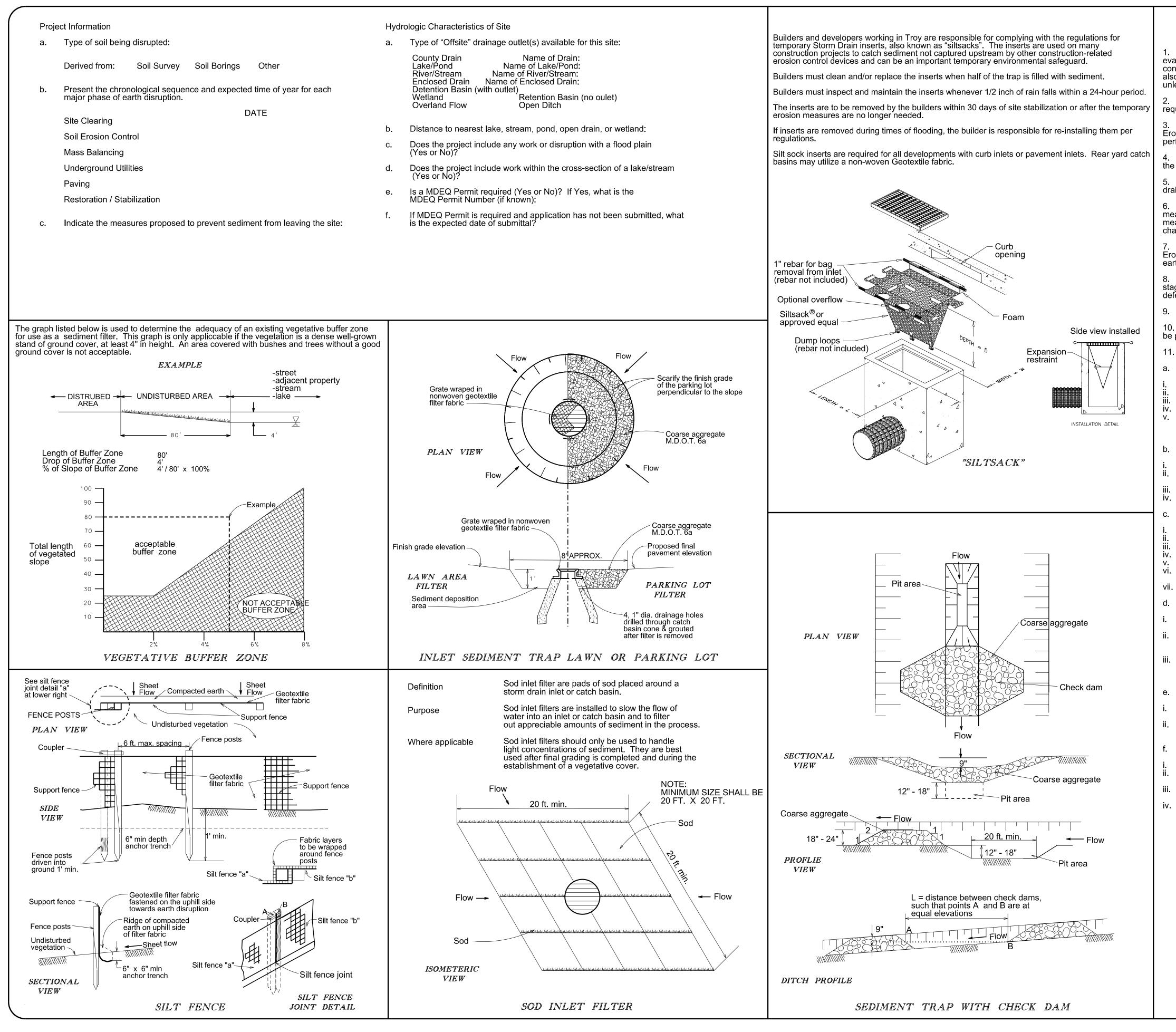
GROUP t: 844.813.2949 www.peagroup.com

CONSULTANT

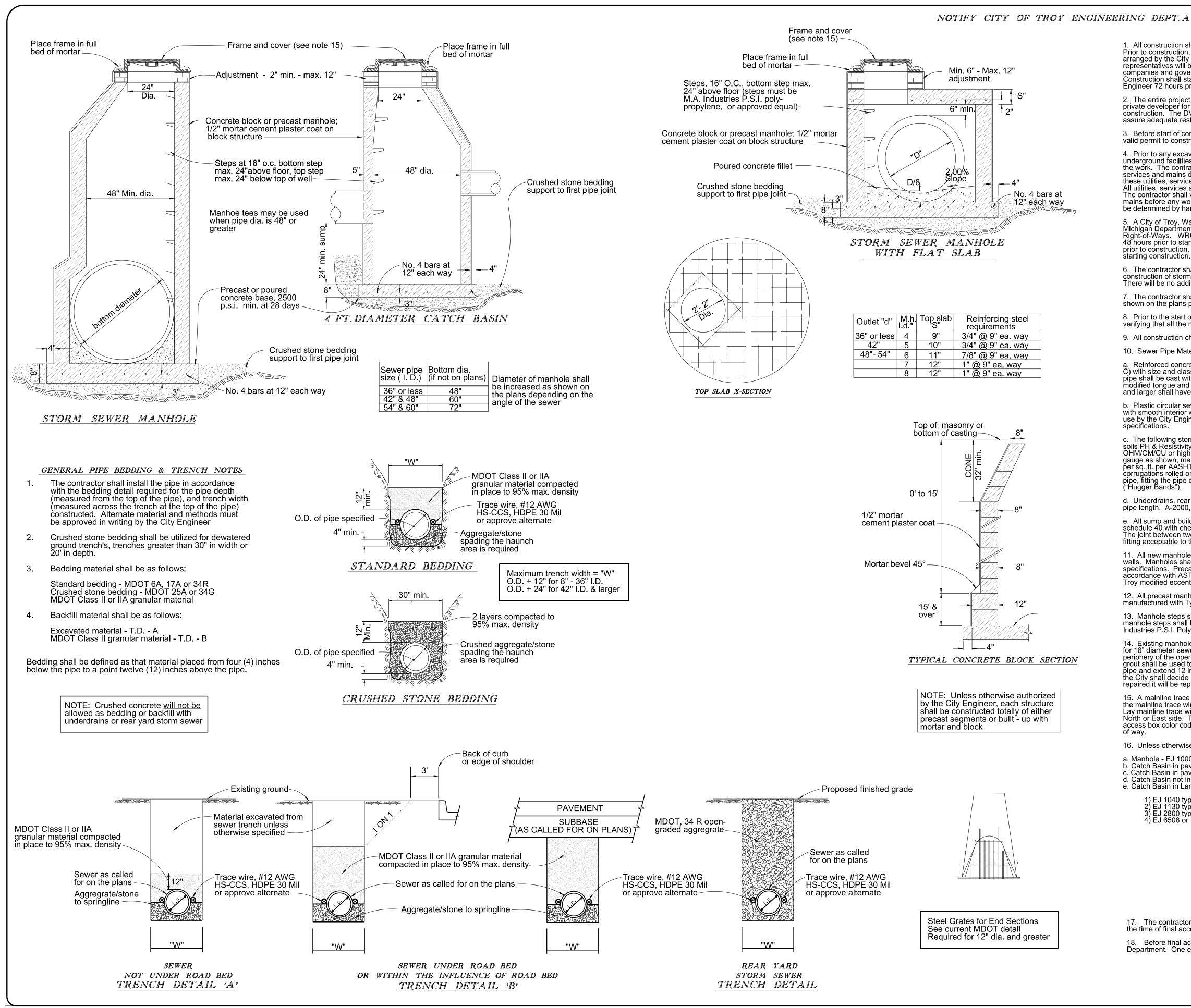
**REGISTRATION SEAL** 

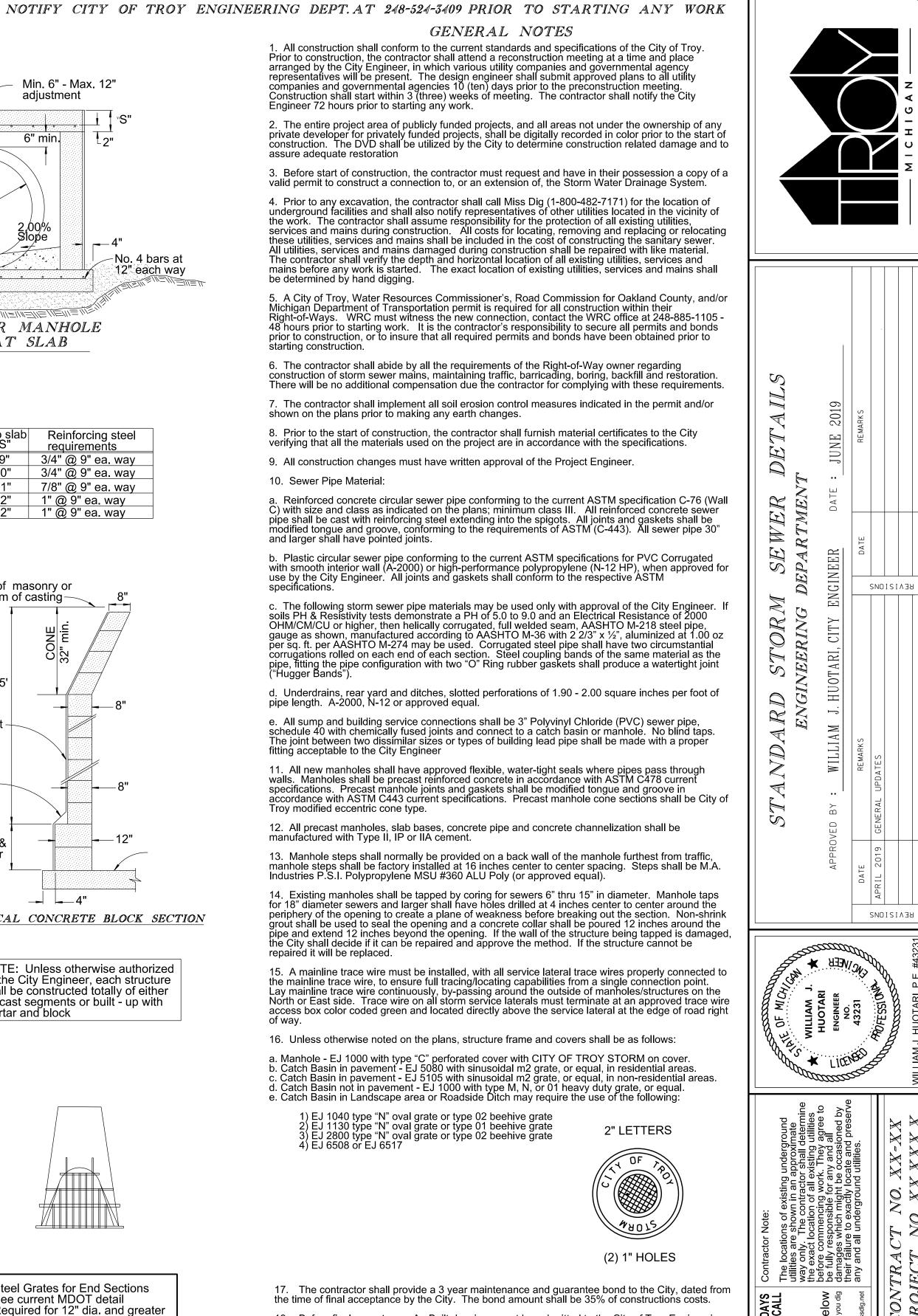






'NG I	DEPT. AT 248-524-3409 PRIOR TO STARTING ANY WORK				
	SOIL EROSION & SEDIMENTATION CONTROL NOTES				
contro also r	The following items are intended to be a guide to the contractor in ating Soil Erosion control requirements for the project. Specific Soil Erosion of devices and locations may be detailed on the plans. The contractor should note that Soil Erosion and Sedimentation controls are included in the project is specified otherwise on the plans or in the specifications.			$\geq$	Z
2. requii	All erosion and Sediment control work shall conform to the permit rements and the standards and specifications of the City of Troy.				СНІС
3. Erosi perfo	Daily inspections shall be made by the contractor for effectiveness of Soil on and Sedimentation control measures and any necessary repairs shall be rmed without delay.				
4	Erosion and any sedimentation from work on this site shall be contained on ite and not allowed to collect on any off-site areas or in waterways.				
5. drains	Waterways include natural or man-made open ditches, streams, storm s, lakes and ponds.				
meas	Contractor shall apply temporary soil erosion and sedimentation control sures when required or as directed. Contractor shall remove temporary sures as soon as permanent stabilization of slopes, ditches, and other earth ges has been accomplished.	S			
7. Erosi earth	Staging the work will be done by the contractor as indicated on the Soil on plans and as required to ensure progressive stabilization of disturbed .	A IIL.			
8. stage defen	The contractor will establish soil erosion control measures in the early as of construction. Sediment control measures will be applied as a perimeter ase against any transporting of silt off the site.	DETAILS	6		
9.	Engineer and owner certification must be included on the plans.		201	REMARKS	
10. be pr	Separate sheets showing soil erosion and sedimentation control plans must ovided.	CONTROL TMENT	JUNE	REN	
11.	The following guidelines are to be implemented:				
a.	Check Dams:	NN IEN	DATE		
i. ii. iii. iv. v.	Stone size must be increased with increased slope and velocity. Side slope of the dam should be 2:1 or flatter. Straw bales are not to be used for check dams. Add stones as needed to maintain design height and cross section. Any accumulation of sediment shall be removed and stockpiled in a stabilized area to prevent the material from eroding back into the drainage course.	AR	ENGINEER	DATE	BEVISIO
b.	Vegetative Buffer Zones:				
i. ii.	Vegetation must be maintained in a vigorous condition. Reshape and reseed areas where concentrated flow occurs or vegetation	SOIL EROSION engineering dep.	HUOTARI, CITY		
iii. iv.	fails. To be used for sheet flows only. Not to be used as a roadway.	AE I	OTAR		
c	Silt Fence:	GII.	HU		
i. ii. iii. iv.	Must be installed along the contour line. Is not to be used in areas of concentrated flow. Must be trenched in at least 6 inches and backfilled. Multiple rows are to be used up a slope.		WILLIAM J.	REMARKS TES	
v. vi. vii.	Accumulated sediment must be periodically removed. Where necessary, a support fence shall be used to support the geotextile filter fabric. To be removed after site is permanently stabilized.	ANDARD		UPDA	
d.	Inlet Sediment Trap:	IN	ED BY	GENERAL	
i.	The sediment deposition area and nonwoven geotextile filter fabric should be cleaned of all accumulated sediment after each storm.		APPROVED	2019 0	
ii. iii.	After all contributing areas are stabilized, the filter fabric will be removed, sediment deposition area filled, and a sod inlet filter placed over the disrupted lawn area. The filter material used to backfill parking lot drainage holes will be	SJ	A	DATI APR I L	
	peastone. The side excavation for the placement of this material will not be deeper than the invert of the drainage holes.			SNO	BEVISIC
e.	Inlet Filters After Paving or Grading:	675500	NVEER	2000	#43231
i. II.	Inlet filters will remain in place until all denuded areas contributing to them are stabilized with vegetation. Periodic inspection and maintenance will be provided to insure that filters are functioning properly.	E OF MICHICAN	ENGINEER NO.	43231 23	WILLIAM J. HUOTARI, P.E.
f.	Sod Inlet Filter:			Æ	H H H
i. ii.	Sod inlet filters will only be used to handle light concentrations of sediment. Recommended for use after final grading is complete and during the establishment of a vegetative cover.	×S××	LICEN		
iii. iv.	Catch basin inlet covers may be wrapped in a non-woven geotextile filter fabric for additional filtration Periodic inspection and maintenance must be provided to insure efficient	ei "f	by Srve		
	operation.	Contractor Note: The locations of existing undercutilities are shown in an approxite way only. The contractor shall of the exact location of all existing before commencing work. They	be fully responsible for al damages which might be their failure to exactly loc	any and al	NTRACT NO. XX-XX DJECT NO. XX.XXX.X
		ORKING DAYS	v what's <b>below</b> all before you dig <i>m</i> , <i>Inc</i> .	1 www.missdig.net	CON PRO





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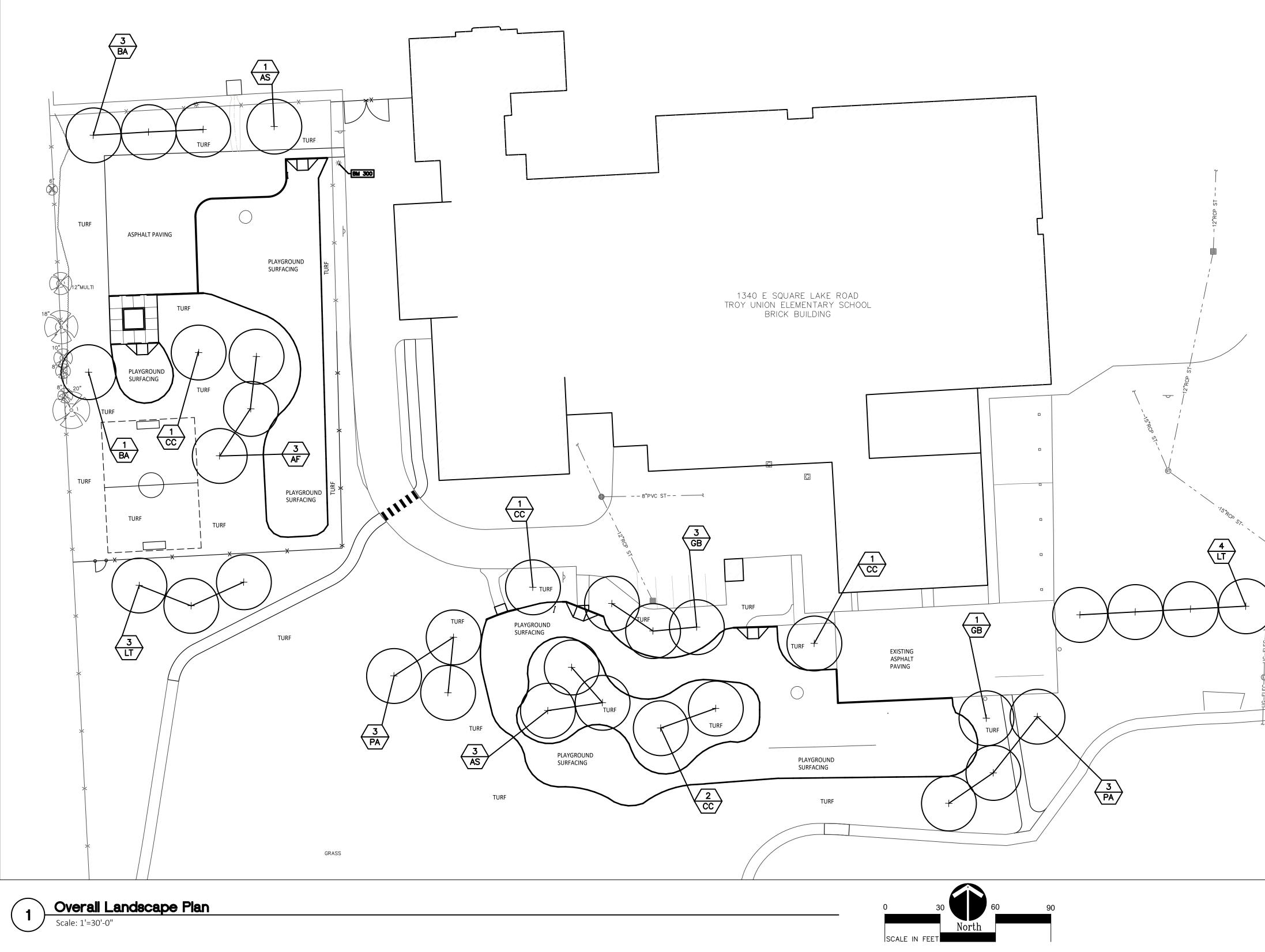
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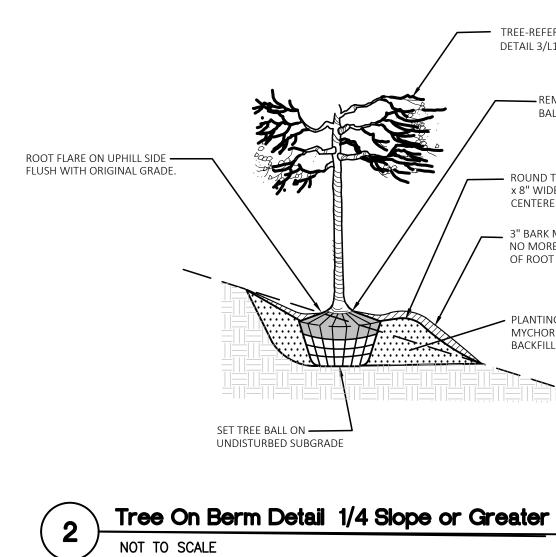
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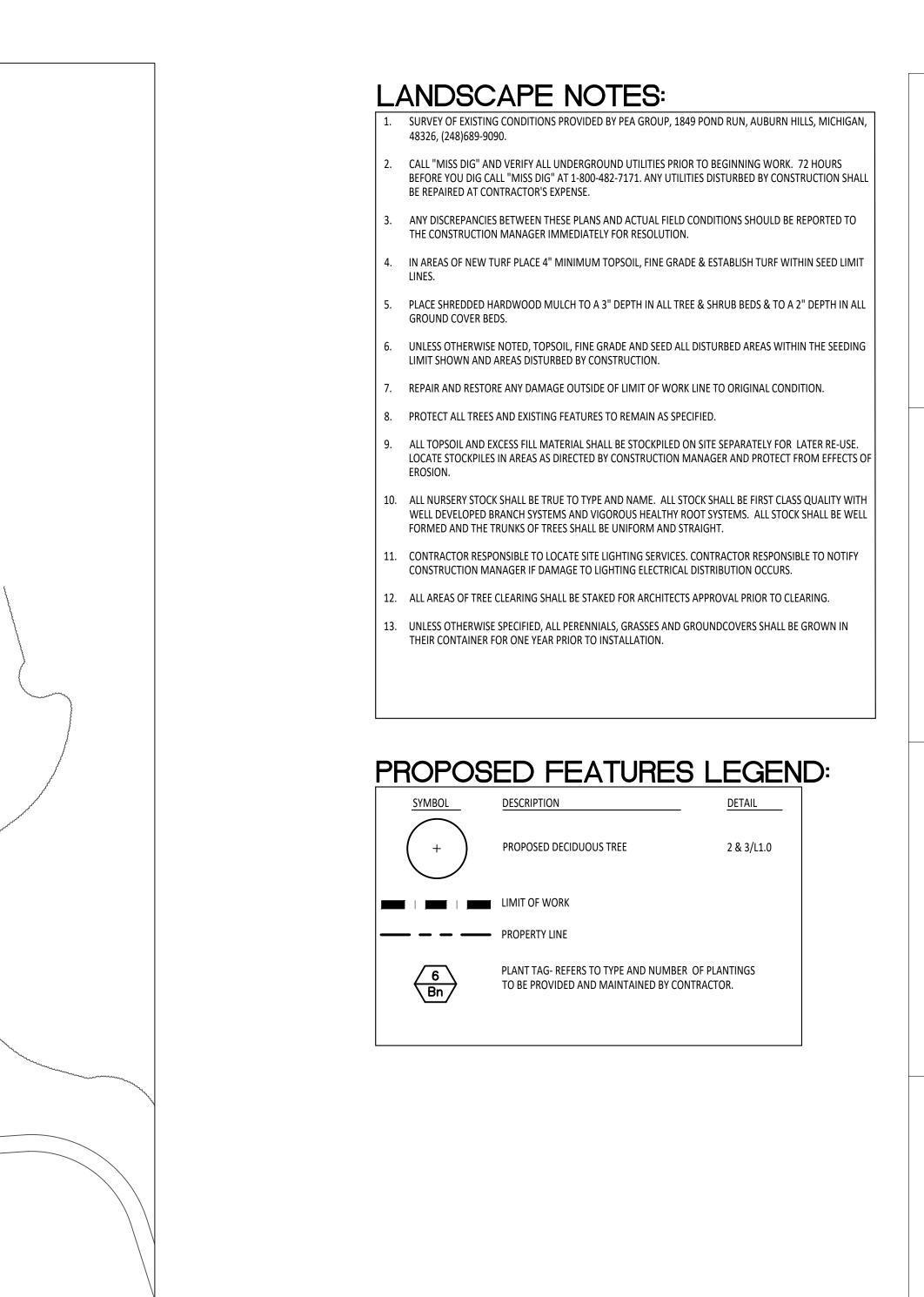
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18. Before final acceptance, As-Built drawings must be submitted to the City of Troy Engineering Department. One electronic copy ( PDF ) and one digital copy ( DWG or DGN ) is required.





NOT TO SCALE



# PLANT LIST:

	S		BOTANICAL NAME	COMMON NAME	SIZE	ROOT	SPACING	STATUS
		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
		BA	Betula alleghaniensis	Yellow Birch	2" CAL.	B&B	PER PLANS	NATIVE
	TREES	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
		PA	Platanus x acerifolia 'Bloodgood'	London Planetree	2" CAL.	B&B	PER PLANS	NON-NATIVE
		LT	Liriodendron tulipfera	Tulip Tree	2" CAL.	B&B	PER PLANS	NATIVE

TREE-REFER TO TREE PLANTING DETAIL 3/L1.0

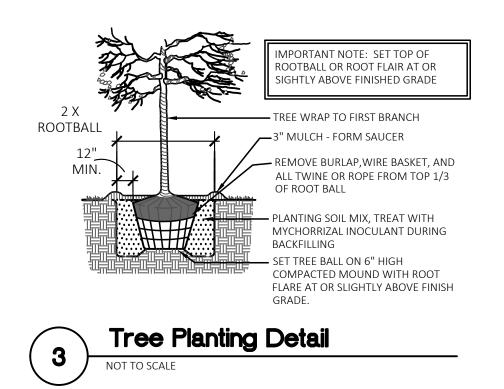
> BALL & ALL TWINE OR ROPE

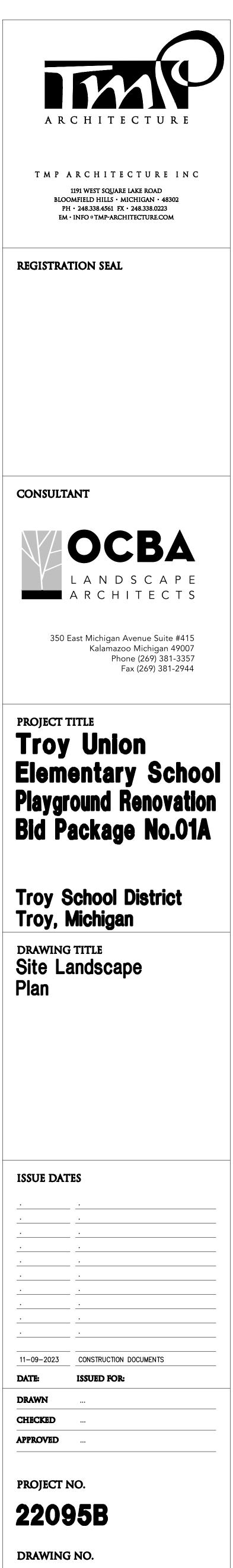
ROUND TOPPED SOIL BERM 4" HIGH x 8" WIDE ABOVE ROOT BALL CENTERED ON DOWNHILL SIDE.

3" BARK MULCH. NO MORE THAN 1" MULCH ON TOP OF ROOT BALL.

PLANTING SOIL MIX, TREAT WITH MYCHORRIZAL INOCULANT DURING BACKFILLING

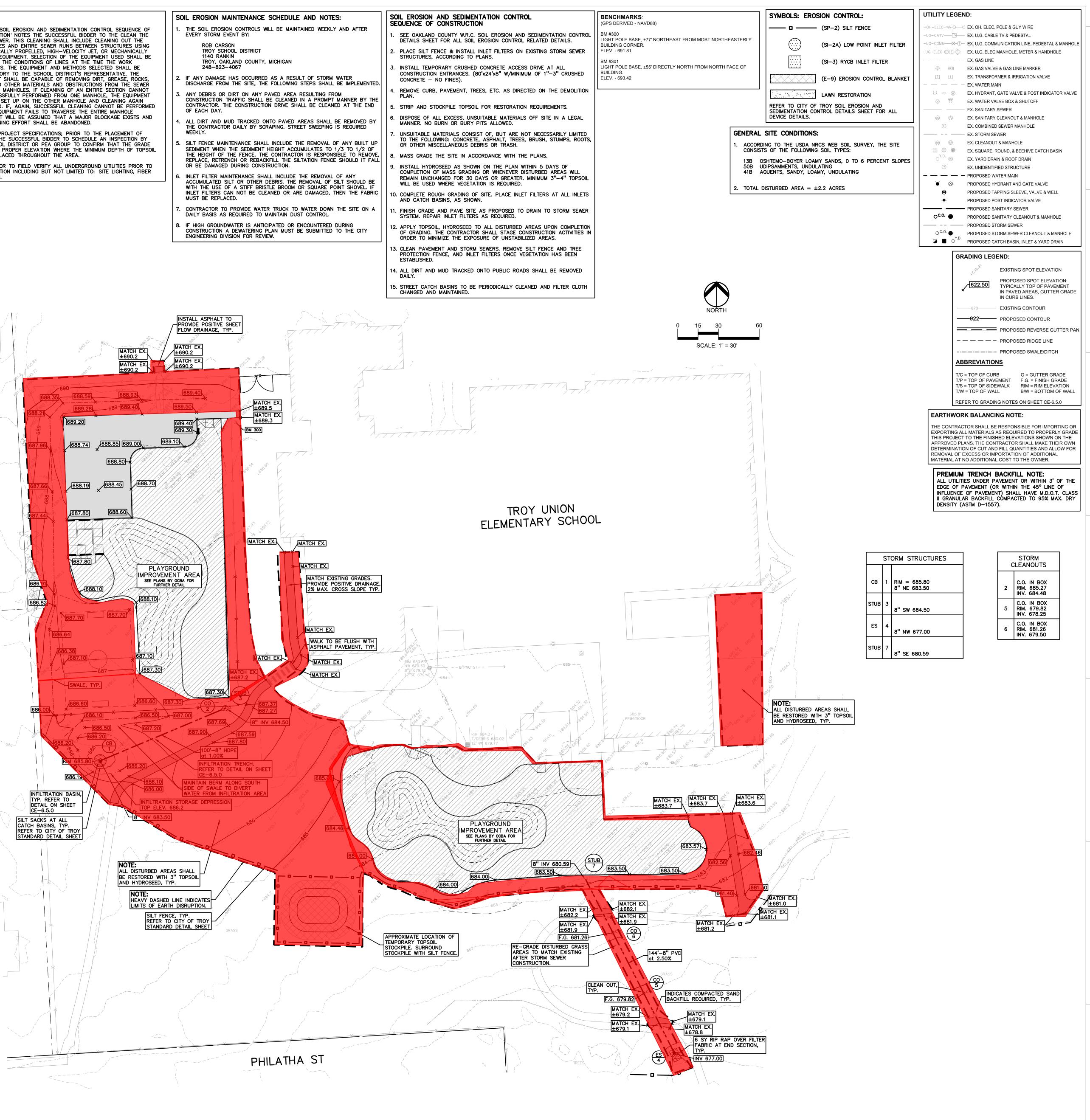
> - ORIGINAL BERM SLOPE  $\overline{}$







DEQUE	NCE	OF CONSTRUCTION:		IE:
START DAY 1	END DAY 2		1.	PER THE "S CONSTRUCT STORM SEW
1	90	MAINTAIN A 25' BUFFER OF VEGETATION AROUND PERIMETER OF SITE WHERE POSSIBLE.		STRUCTURE: HYDRAULICA POWERED E
1	5	STRIP AND STOCKPILE TOPSOIL AS REQUIRED RESTORATION. ALL STOCKPILES MUST BE GRADED AND SEEDED.		BASED ON COMMENCES SATISFACTO
5	15	REMOVE ALL PAVEMENT, CURB, UTILITIES, ETC. AS REQUIRED TO INSTALL THE PROPOSED WORK AS SHOWN ON THE TOPOGRAPHIC SURVEY AND DEMOLITION PLAN.		EQUIPMENT SAND, AND LINES AND
10	15	DISPOSE OF ALL EXCESS/UNSUITABLE MATERIALS OFF SITE IN A LEGAL MANNER. NO ON-SITE BURN OR BURY PITS ALLOWED.		BE SUCCES SHALL BE S ATTEMPTED.
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.		OR THE EQ SECTION, IT THE CLEAN
15	90	TEMPORARY SEEDING MUST BE PROVIDED IN AREAS NOT TO BE WORKED ON FOR 15 DAYS OR LONGER.	2.	PER THE P TOPSOIL TH
40	50	FINE GRADE SITE AND PREPARE FOR SITE PAVING OPERATIONS.		THE SCHOO IS AT THE CAN BE PL
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.	3.	CONTRACTO CONSTRUCT LINES, ETC.
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.		



Markup Made By Barton Malow





ISSUE DAT	ES		
11-9-2023		CONSTRUCTION DOCUMENTS	
DATE:	ISSUEI	d for:	
DRAWN	WR		
CHECKED	RR		
APPROVED	TD		

**Troy School District** Troy, Michigan DRAWING TITLE Grading, Utility & Soil **Erosion Control Plan** 

**Playground Renovation Bid Package No.01A** 

PROJECT TITLE **Troy Union Elementary School** 1340 E SQUARE LAKE ROAD

GROUP t: 844.813.2949 www.peagroup.com

CONSULTANT

**REGISTRATION SEAL** 



