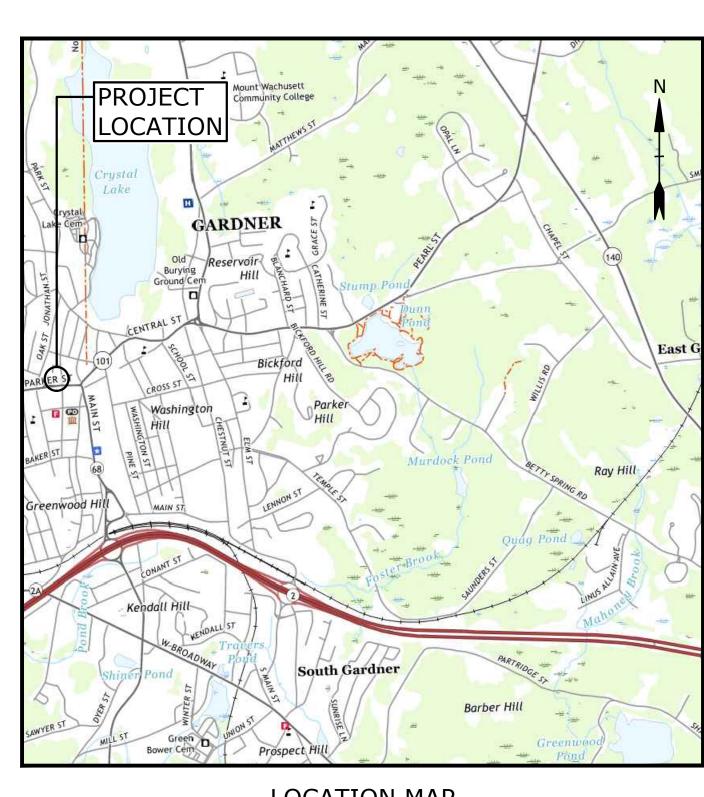
# CITY OF GARDNER, MA MAKI PARK PROJECT 57 PARKER STREET

# ISSUED FOR BIDDING MAY 2023

LIST OF DRAWINGS						
SHEET NO.	DRAWING NO.	DRAWING TITLE				
1	G-000	COVER				
2	G-001	GENERAL NOTES, LEGEND & ABBREVIATIONS				
3	C-101	EXISTING CONDITIONS AND DEMOLITION PLAN				
4	C-201	SITE LAYOUT PLAN				
5	C-301	GRADING & DRAINAGE PLAN				
6	C-401	SITE FURNISHING & LANDSCAPING PLAN				
7	C-501	SITE DETAILS - 1				
8	C-502	SITE DETAILS - 2				
9	C-503	SITE DETAILS - 3				
10	E-001	ELECTRICAL NOTES, LEGEND, & ABBREVIATIONS				
11	E-100	ELECTRICAL PLAN				
12	E-501	ELECTRICAL DETAILS - 1				
13	E-502	ELECTRICAL DETAILS - 2				



LOCATION MAP

SCALE: 1" = 2000'

Tighe&Bond

PREPARED FOR:
CITY OF GARDNER, MA
DEPT. OF COMMUNITY DEVELOPMENT AND PLANNING
CITY HALL ANNEX - ROOM 21
115 PLEASANT ST
GARDNER, MA 01440

JOSEPH P. VIAMARI, JR., PE

**COMPLETE SET 13 SHEETS** 

MATTHEW P. WZOREK, PE

<u>LEGEND</u>			
DESCRIPTION	EXIS	STING	PROPOSED
PROPERTY LINE			
RIGHT-OF-WAY LINE			
EASEMENT LINE			
LIMITS OF WORK			
INTERMEDIATE CONTOURS	2	21 - — — — — —	21
INDEX CONTOURS	<u> </u>	5 — — — —	25
SPOT GRADE	+ 1	141.2	+ 32.0
MAGNITUDE & DIRECTION OF SLOPE			0.0%
STORM DRAIN	SD	SD	SD
STORM UNDERDRAIN	SS	- 22	UD
GRAVITY SANITARY SEWER SANITARY SEWER FORCE MAIN		M	
SANITARY SEWER LOW PRESSURE		— — SSLP — — —	
SANITARY SEWER COMBINED		MB ———	
WATER SERVICE			
POTABLE WATER		W	
FIRE SERVICE			
HIGH PRESSURE FIRE SERVICE			
UNDERGROUND ELECTRIC	——Е—	— Е — —	——— E ———— E ———
PRIMARY ELECTRIC SERVICE	PI	Ε	
SECONDARY ELECTRIC	SI	E ———	
OVERHEAD ELECTRIC	OE	OE	
TELEPHONE SERVICE	т	Т ———	
TEL-DATA SERVICE	——— T-D	T-D	
COMMUNICATIONS SERVICE	——— T–C ———		
CABLE TV SERVICE		CTV —	
GAS SERVICE OVERHEAD UTILITY (UNSPECIFIED)	G	G	
CURB		OT 1 VV	
EDGE OF PAVEMENT			
DIRT ROAD			
SIDEWALK			
RETAINING WALL			
STONE WALL	. 000000000	000000000	- 0000000000000000000000000000000000000
FENCE - UNSPECIFIED	——————————————————————————————————————	< ×	
FENCE - CHAIN LINK	-× × ×	× ×	
FENCE - WOOD POST	_00	0	
GUARDRAIL		0-0-0-	
TIMBER GUIDERAIL TRAIN TRACKS			
STORM DRAIN STRUCTURES	MANHOLE ①	$\begin{array}{c} \textit{CATCH} \\ \textit{BASIN} \end{array}$	
SANITARY SEWER MANHOLE			
WATER SERVICE STRUCTURES	HYDRANT 💢 MANH	JOLE ₩ VALVE ₩	
GAS SERVICE STRUCTURES	manhole ©	VALVE ⋈ GG	
ELECTRIC SERVICE STRUCTURES	UTILITY CO. 🖝 MANH POLE #	OLE © LIGHT	
TELECOMMUNICATIONS MANHOLE	(I		
TREELINE			
TREE	EVERGREEN	DECIDUOUS	○ ○ EVERGREEN ○ ⑤ DECIDUOUS

#### **LEGEND**

DEMOLITION / GEOTECHNICAL	
EROSION & SEDIMENT CONTROL	
UTILITY TO BE ABANDONED	411111111111111111111111111111111111111
UTILITY TO BE DEMOLISHED	*****
ITEM TO BE DEMOLISHED	

ΔRRRFV	IATIONS
ADDILL	<u> </u>
ВС	BITUMINOUS CURB
BIT	BITUMINOUS
BL	BASELINE
BLDG	BUILDING
BOC BOT	BOTTOM OF CURB BOTTOM
BS	BOTTOM BOTTOM OF STEP
BW	BOTTOM OF WALL
СВ	CATCH BASIN
CEM	CEMENT
CI CL	CAST IRON PIPE
CO	CENTERLINE CLEAN OUT
CONC	CONCRETE
CPP	CORRUGATED
	POLYETHYLENE PIPE
CY	CUBIC YARD
DH	DRILL HOLE
DI DIA	DUCTILE IRON PIPE DIAMETER
DMH	DRAIN MANHOLE
E	EAST
EF	EACH FACE
EG	EXISTING GRADE
EL/ELEV	ELEVATION
ELEC EMH	ELECTRIC ELECTRIC MANHOLE
EOP	EDGE OF PAVEMENT
EW	EACH WAY
EXIST	EXISTING
FES	FLARED END SECTION
FM	FORCE MAIN
G	GAS
GG GRAN	GAS GATE GRANITE
HC	HANDICAP
HDPE	HIGH DENSITY
	POLYETHYLENE
HMA	HOT MIX ASPHALT
HYD IN	HYDRANT INCHES
INV	INVERT
IP	IRON PIN
L	LENGTH OF CURB
LP	LIGHT POLE
LT MAX	LEFT MAXIMUM
MH	MANHOLE
MIN	MINIMUM
MISC	MISCELLANEOUS
MON	MONUMENT
N NITC	NORTH NOT IN THIS CONTRACT
NTS	NOT TO SCALE
N/A	NOT APPLICABLE
N/F	NOW OR FORMERLY
OC	ON CENTER
OH	OVERHEAD
PC PCC	POINT OF CURVATURE POINT OF COMPOUND
FCC	CURVATURE
PERF	PERFORATED
PI	POINT OF INTERSECTION
PRC	POINT OF REVERSE CURVATU
PSF PSI	POUNDS PER SQUARE FOOT POUNDS PER SQUARE INCH
PT	POINT OF TANGENCY
PVC	POLYVINYLCHLORIDE
PVMT	PAVEMENT
R	RADIUS
RCP	REINFORCED CONCRETE PIP
REV ROW	REVISION RIGHT OF WAY
RT	RIGHT
R&D	REMOVE AND DISPOSE
R&R	REMOVE AND RESET
R&S	REMOVE AND STACK
S	SOUTH
SAN SCH	SANITARY SCHEDULE
SF	SQUARE FOOT
SS	STAINLESS STEEL
STA	STATION
STRM	STORM
T	TANGENT LENGTH
TC TP	TOP OF CURB TEST PIT
TS	TOP OF STEP
TW	TOP OF WALL

#### **BASE PLAN NOTES**

TOP OF WALL TYPICAL UTILITY POLE WATER WATER GATE WATER VALVE

- 1. THE EXISTING CONDITIONS INFORMATION SHOWN ON THE DRAWINGS IS BASED ON THE FOLLOWING:
- SURVEY DRAWINGS PROVIDED BY WSP USA, INC., TITLED "EXISTING CONDITIONS PLAN PHASE 4 AND MAKI PARK GARDNER, MASSACHUSETTS," AND DATED SEPTEMBER 23, 2022.
- 2. UTILITY LOCATIONS SHOWN WERE PLOTTED FROM INFORMATION SUPPLIED BY RESPECTIVE UTILITY COMPANIES AND DATA OBTAINED FROM FIELD SURVEYS AND AS BUILT DRAWINGS. THE ACCURACY AND COMPLETENESS OF SUBSURFACE INFORMATION SHOWN ON THESE DRAWINGS IS NOT GUARANTEED. DETERMINE THE LOCATIONS AND ELEVATIONS OF ALL UTILITIES WHICH MAY AFFECT CONSTRUCTION OPERATIONS.
- 3. THE DRAWINGS ARE BASED ON THE FOLLOWING DATUMS: HORIZONTAL NAD83; VERTICAL NAVD88.
- 4. THE EXISTING CONDITIONS SHOWN ARE APPROXIMATE. FIELD VERIFY EXISTING CONDITIONS
- 5. THE PROPERTY LINES SHOWN ON THE DRAWINGS ARE APPROXIMATE AND ARE NOT BASED ON DEED OR PLAN RESEARCH.

#### **GENERAL NOTES**

- 1. NOTIFY DIGSAFE AT 1-888-344-7233 AND OTHER UTILITY OWNERS IN THE AREA NOT ON THE DIGSAFE LIST AT LEAST 72 HOURS PRIOR TO ANY DIGGING, TRENCHING, ROCK REMOVAL, DEMOLITION, BORING, BACKFILLING, GRADING, LANDSCAPING, OR ANY OTHER EARTH MOVING OPERATIONS.
- 2. LOCATIONS OF EXISTING UTILITIES ARE APPROXIMATE. IN ADDITION, SOME UTILITIES MAY NOT BE SHOWN. DETERMINE THE EXACT LOCATION OF UTILITIES BY TEST PIT OR OTHER METHODS, AS NECESSARY TO PREVENT DAMAGE TO UTILITIES AND/OR INTERRUPTIONS IN UTILITY SERVICE. PERFORM TEST PIT EXCAVATIONS AND OTHER INVESTIGATIONS TO LOCATE UTILITIES, AND PROVIDE THIS INFORMATION TO THE ENGINEER, PRIOR TO CONSTRUCTING THE PROPOSED IMPROVEMENTS. LOCATE ALL EXISTING UTILITIES TO BE CROSSED BY HAND EXCAVATION.
- 3. NOT ALL OF THE UTILITY SERVICES TO BUILDINGS ARE SHOWN. THE CONTRACTOR SHALL ANTICIPATE THAT EACH PROPERTY HAS SERVICE CONNECTIONS FOR THE VARIOUS UTILITIES.
- 4. BOLD TEXT AND LINES INDICATE PROPOSED WORK. LIGHT TEXT AND LINES INDICATE APPROXIMATE EXISTING CONDITIONS.
- 5. TIGHE & BOND ASSUMES NO RESPONSIBILITY FOR ANY ISSUES, LEGAL OR OTHERWISE, RESULTING FROM CHANGES MADE TO THESE DRAWINGS WITHOUT WRITTEN AUTHORIZATION FROM TIGHE & BOND.
- 6. EXCAVATE ADDITIONAL TEST PITS TO LOCATE EXISTING UTILITIES AS DIRECTED OR APPROVED BY THE ENGINEER.
- 7. NOTIFY THE ENGINEER OF ANY UTILITIES IDENTIFIED DURING CONSTRUCTION THAT ARE NOT SHOWN ON THE DRAWINGS OR THAT DIFFER IN SIZE OR MATERIAL.
- 8. THE CONTRACTOR IS RESPONSIBLE FOR SITE SAFETY; COORDINATION WITH THE OWNER, ALL SUBCONTRACTORS, AND WITH OTHER CONTRACTORS WORKING WITHIN THE LIMITS OF WORK, THE MEANS AND METHODS OF CONSTRUCTING THE PROPOSED WORK.
- 9. OBTAIN, PAY FOR AND COMPLY WITH PERMITS, NOTICES AND FEES NECESSARY TO COMPLETE THE WORK. ARRANGE AND PAY FOR NECESSARY INSPECTIONS AND APPROVALS FROM THE JURISDICTIONAL AUTHORITIES.
- 10. SHORE UTILITY TRENCHES WHERE FIELD CONDITIONS DICTATE AND/OR WHERE REQUIRED BY LOCAL, STATE AND FEDERAL HEALTH AND SAFETY CODES.
- 11. FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO CONSTRUCTION. IF FIELD CONDITIONS ARE OBSERVED THAT VARY SIGNIFICANTLY FROM THOSE SHOWN ON THE DRAWINGS, IMMEDIATELY NOTIFY THE ENGINEER IN WRITING FOR RESOLUTION OF THE CONFLICTING INFORMATION.
- 12. PROTECT AND MAINTAIN ALL UTILITIES IN THE AREAS UNDER CONSTRUCTION DURING THE WORK. LEAVE ALL PIPES AND STRUCTURES WITHIN THE LIMITS OF THE CONTRACT IN A CLEAN AND OPERABLE CONDITION AT THE COMPLETION OF THE WORK. TAKE ALL NECESSARY PRECAUTIONS TO PREVENT SAND AND SILT FROM DISTURBED AREAS FROM ENTERING THE DRAINAGE SYSTEM.
- 13. NOTIFY THE ENGINEER IN WRITING OF ANY CONFLICT, ERROR, AMBIGUITY, OR DISCREPANCY WITH THE PLANS OR BETWEEN THE PLANS AND ANY APPLICABLE LAW, REGULATION, CODE, STANDARD SPECIFICATION, OR MANUFACTURER'S INSTRUCTIONS.
- 14. THE CONTRACTOR IS RESPONSIBLE FOR SUPPORT OF EXISTING UTILITIES AND REPAIR OR REPLACEMENT COSTS OF UTILITIES DAMAGED DURING CONSTRUCTION, WHETHER ABOVE OR BELOW GRADE. REPLACE DAMAGED UTILITIES IMMEDIATELY AT NO ADDITIONAL COST TO THE OWNER AND AT NO COST TO THE PROPERTY OWNER.
- 15. TAKE NECESSARY MEASURES AND PROVIDE CONTINUOUS BARRIERS OF SUFFICIENT TYPE, SIZE, AND STRENGTH TO PREVENT ACCESS TO ALL WORK AND STAGING AREAS AT THE COMPLETION OF EACH DAYS WORK.
- 16. NO OPEN TRENCHES WILL BE ALLOWED OVER NIGHT. THE USE OF ROAD PLATES TO PROTECT THE EXCAVATION WILL BE CONSIDERED UPON REQUEST, BUT BACKFILLING IS PREFERRED.
- 17. THE CONTRACTOR IS RESPONSIBLE FOR ALL NECESSARY TRAFFIC CONTROL/SAFETY DEVICES TO ENSURE SAFE VEHICULAR AND PEDESTRIAN ACCESS THROUGH THE WORK AREA, OR FOR SAFELY IMPLEMENTING DETOURS AROUND THE WORK AREA. PERFORM TRAFFIC CONTROL IN ACCORDANCE WITH THE CONTRACTOR'S APPROVED TRAFFIC CONTROL PLAN.
- 18. MAINTAIN EMERGENCY ACCESS TO ALL PROPERTIES WITHIN THE PROJECT AREA AT ALL TIMES DURING CONSTRUCTION.
- 19. WHEN WORKING IN THE ROAD, PROVIDE THE OWNER AND LOCAL FIRE/POLICE/SCHOOL AUTHORITIES A DETAILED PLAN OF APPROACH INDICATING METHODS OF PROPOSED TRAFFIC ROUTING ON A DAILY BASIS. PROVIDE COORDINATION TO ENSURE COMMUNICATION AND COORDINATION BETWEEN THE OWNER, CONTRACTOR AND LOCAL FIRE/POLICE/SCHOOL AUTHORITIES THROUGHOUT THE CONSTRUCTION PERIOD.
- 20. REMOVE AND DISPOSE OF ALL CONSTRUCTION-RELATED WASTE MATERIALS AND DEBRIS IN STRICT ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL LAWS.
- 21. THE TERM "DEMOLISH" USED ON THE DRAWINGS MEANS TO REMOVE AND DISPOSE OF IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REQUIREMENTS.
- 22. THE TERM "ABANDON" USED ON THE DRAWINGS MEANS TO LEAVE IN PLACE AND TAKE APPROPRIATE MEASURES TO DECOMMISSION AS SPECIFIED OR NOTED ON THE DRAWINGS.
- 23. ALL PROPOSED WORK MAY BE ADJUSTED IN THE FIELD BY THE OWNER'S PROJECT REPRESENTATIVE TO MEET EXISTING CONDITIONS.

#### **ISSUED FOR BIDDING**

#### Maki Park **Project**

Department of Community Development and Planning

Gardner, MA

0	5/2/2023	ISSUED FOR BIDDING
MARK	DATE	DESCRIPTION
PROJE	CT NO:	G0384-80
DATE:		05/2023
FILE:	G0384	-80 G-000-COV-NOTES.dwg
DRAWI	N RV:	IDG

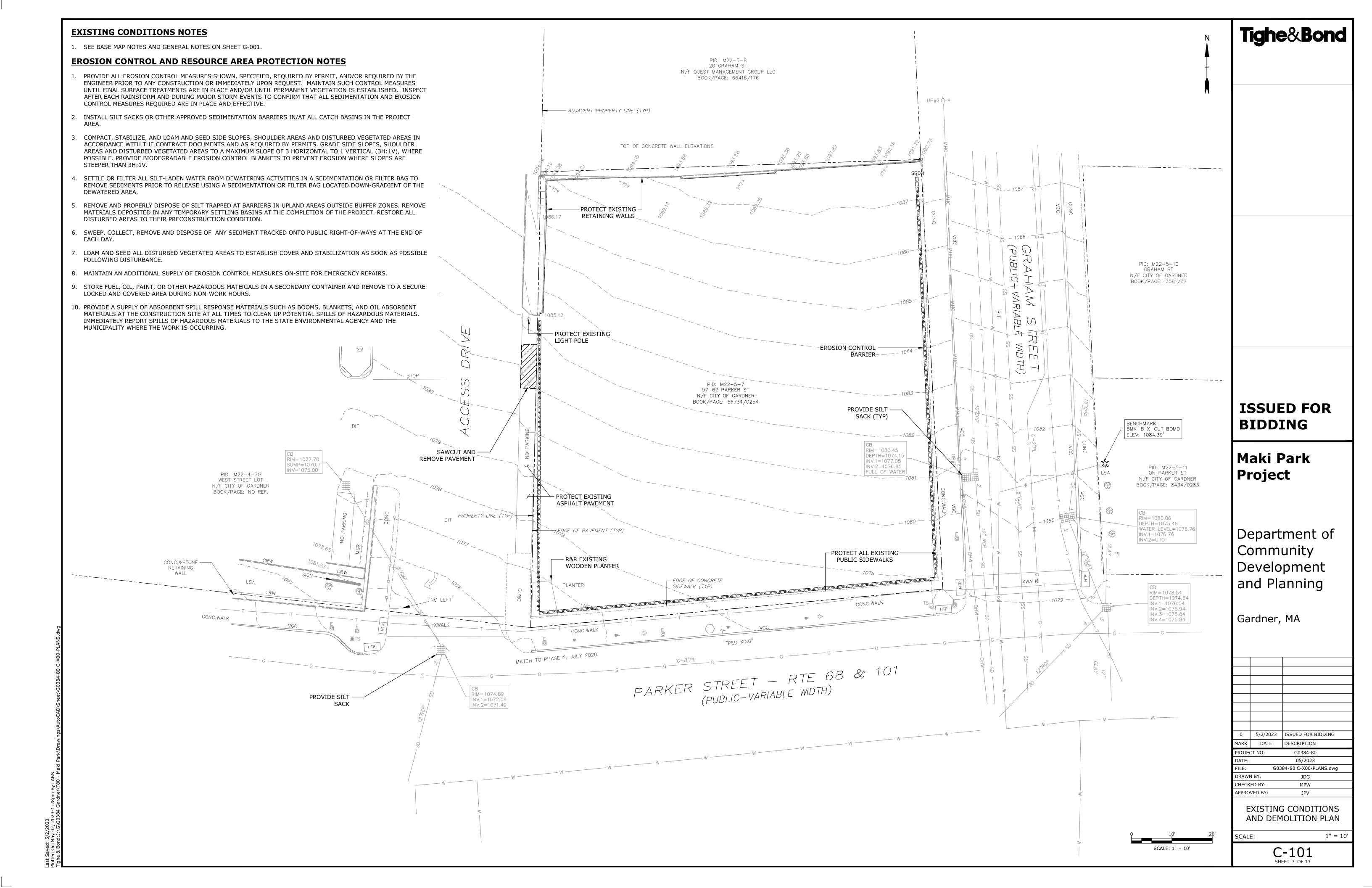
**GENERAL NOTES, LEGEND &** ABBREVIATIONS

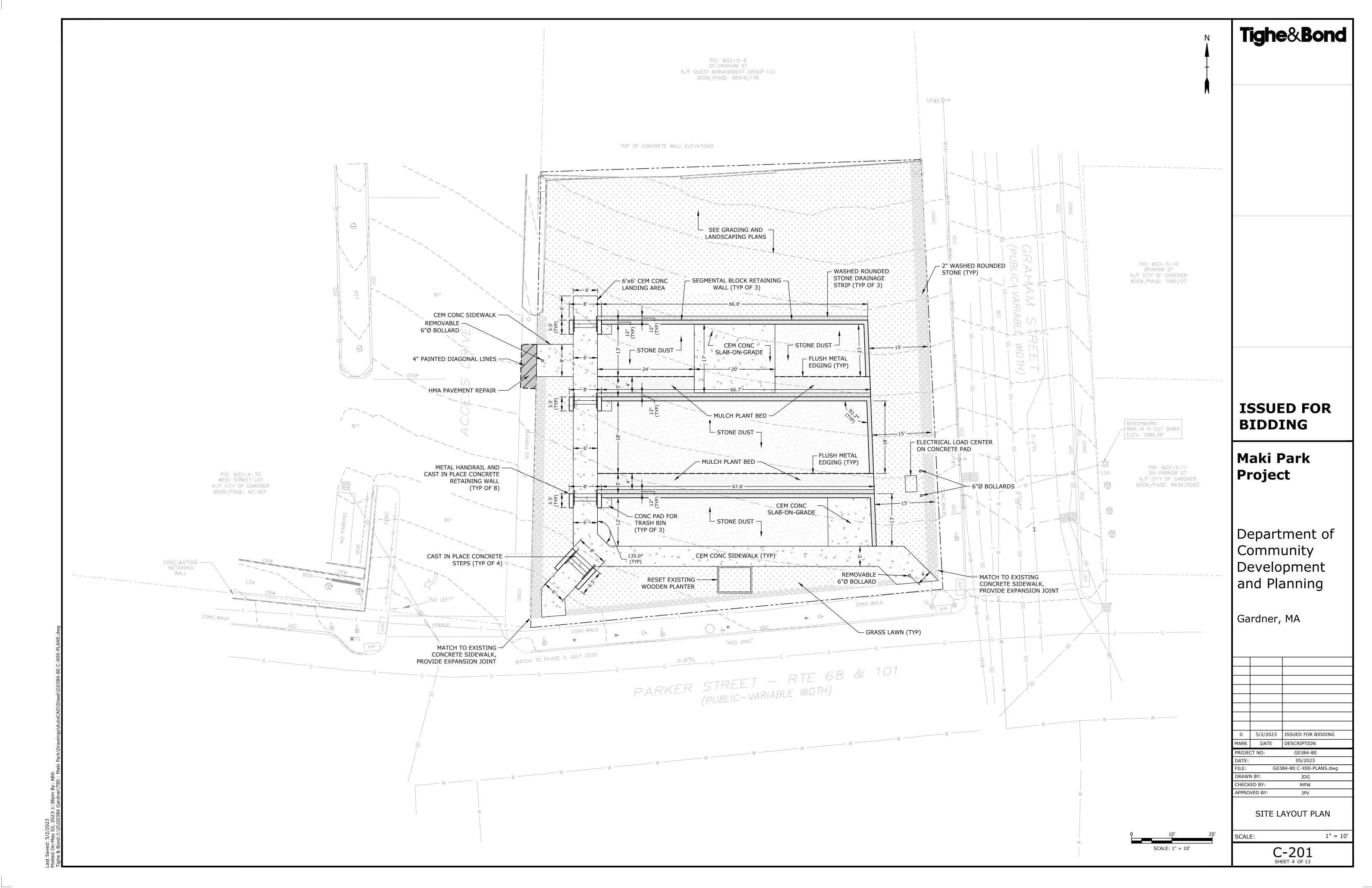
MPW JPV

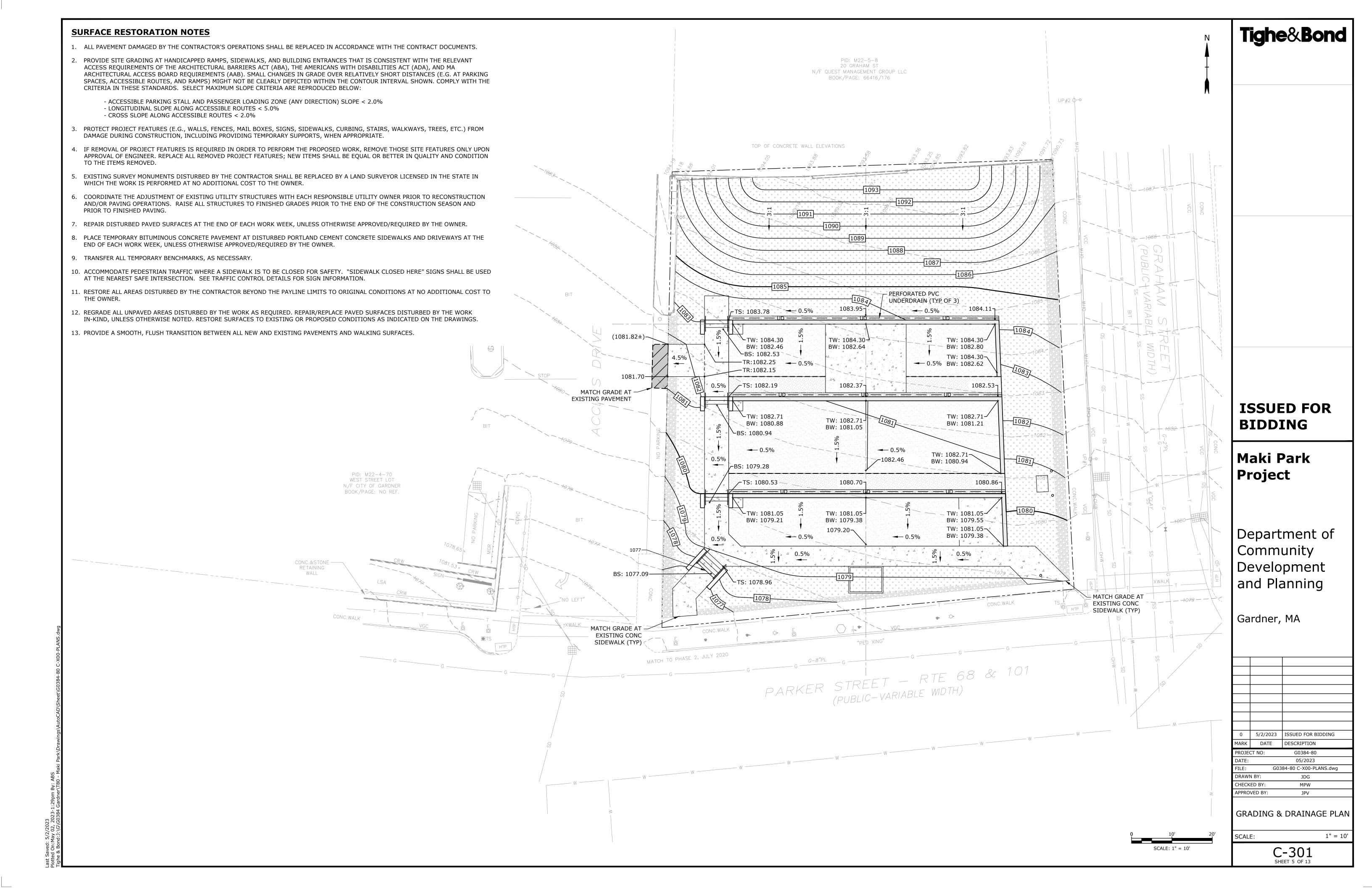
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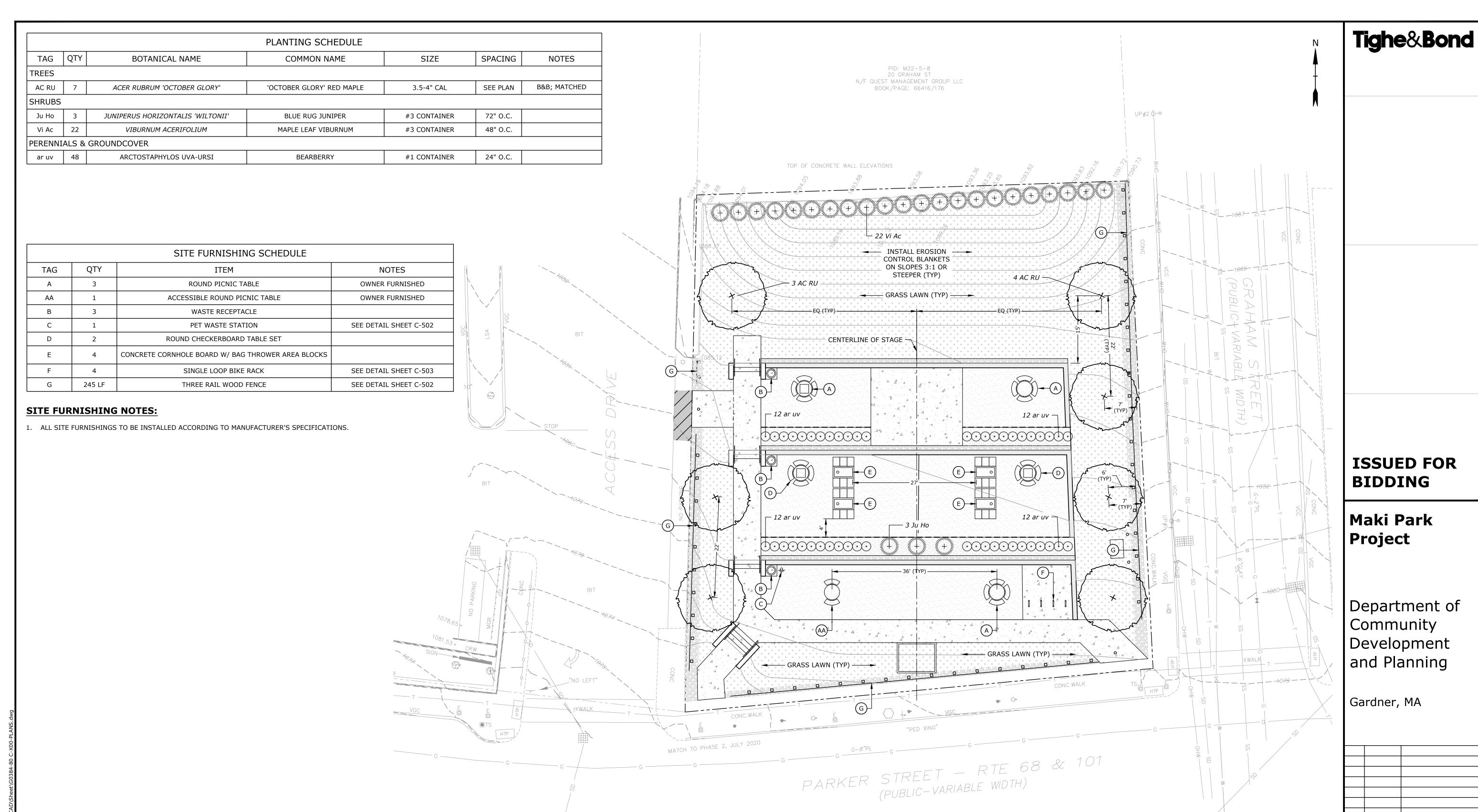
CHECKED BY:

G-001 SHEET 2 OF 13









5/2/2023 ISSUED FOR BIDDING
DATE DESCRIPTION
ECT NO: G0384-80

ROJECT NO: G0384-80

PATE: 05/2023

FILE: G0384-80 C-X00-PLANS.dwg

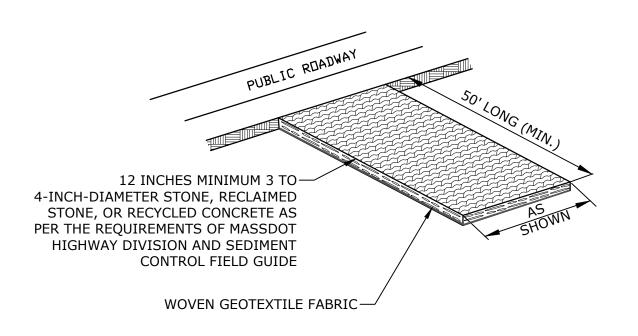
PRAWN BY: JDG

CHECKED BY: MPW

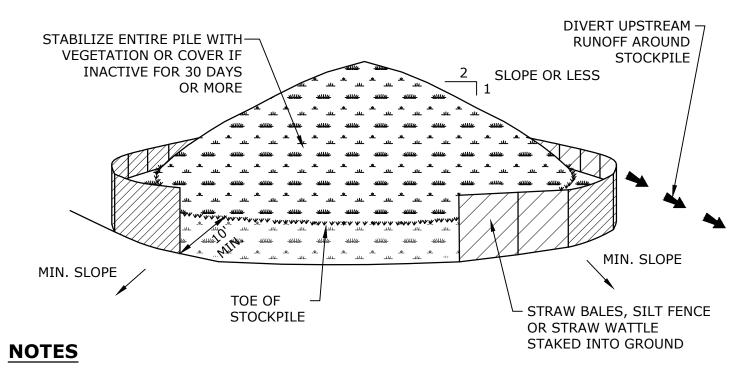
RAPPROVED BY: JPV

SITE FURNISHING & LANDSCAPING PLAN

C-401
SHEET 6 OF 13

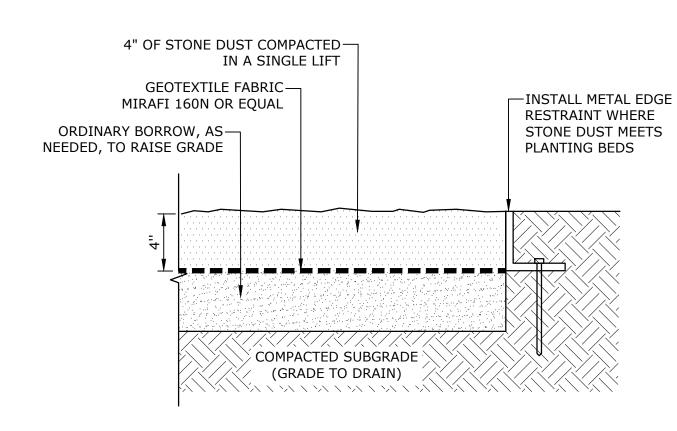


#### STABILIZED CONSTRUCTION ENTRANCE/EXIT



- 1. AREA CHOSEN FOR STOCKPILING OPERATIONS SHALL BE DRY AND STABLE.
- 2. MAXIMUM SLOPE OF STOCKPILE SHALL BE 2H:1V.
- 3. UPON COMPLETION OF SOIL STOCKPILING, EACH PILE SHALL BE SURROUNDED WITH STRAW WATTLES, THEN STABILIZED WITH VEGETATION OR COVERED.

#### SOIL STOCKPILING NO SCALE



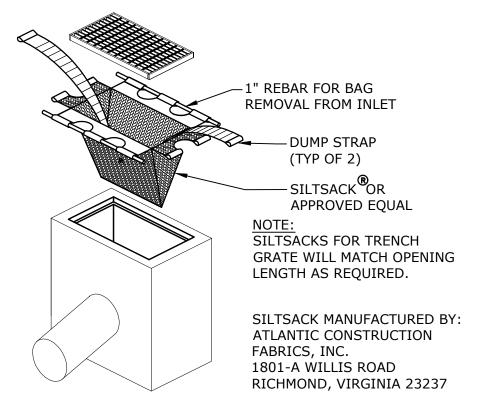
STONE DUST GRADATION REQUIREMENTS							
SIEVE SIZE DESIGNATION	PERCENT PASSING BY WEIGHT						
½ INCH	100						
#10	55 - 75						
#40	20 - 40						
#200	7 - 15						

#### **NOTES**

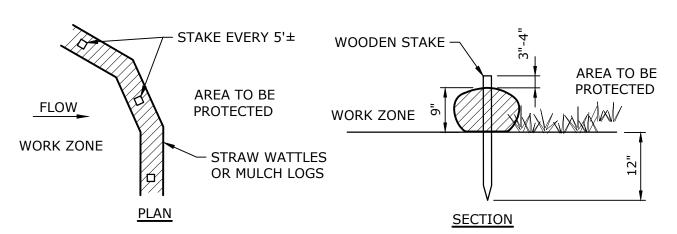
- 1. STONE DUST WILL BE ACCEPTED ON THE BASIS OF MAGNESIUM SULFATE SOUNDNESS LOSS AFTER 4 CYCLES OF 20 PERCENT OR LESS.
- 2. STONE DUST MATERIAL WILL HAVE A PLASTIC INDEX OF THE MATERIAL PASSING THE #40 MESH SIEVE OF NOT GREATER THAN 5.0.

**STONE DUST** 

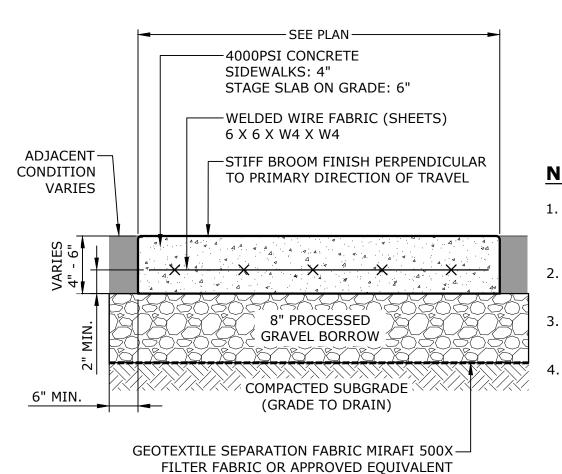
NO SCALE



#### SILTSACK® INLET PROTECTION



#### EROSION CONTROL BARRIERS NO SCALE



#### **NOTES**

- 1. CROSS SLOPE SHALL NOT EXCEED 1.5% LONGITUDINAL SLOPE SHALL NOT EXCEED 4.5%.
- 2. CONTROL JOINTS 5' MAX. SPACING OR AS SHOWN ON PLANS.
- . EXPANSION JOINTS 20' MAX. SPACING OR AS SHOWN ON PLANS.
- CHEMICAL CURING AND ANTI-SPALLING
  COMPOUND (SEALER) ASTM C-309, TYPE 1D,
  CLASS B WITH MINIMUM 18% TOTAL SOLIDS
  CONTENT. NO THINNING OF MATERIAL
  ALLOWED. APPLY (2) COATS OF APPROVED
  SEALER TO TOP OF CONCRETE.

#### **NOTES**

GRAVEL-FILLED BAGS-

IN CORNER

STRAW BALE

WOOD OR METAL

STAKES (2 PER BALE)

- 1. TEMPORARY CONCRETE WASHOUT FACILITIES SHOULD BE LOCATED A MINIMUM OF 50 FEET FROM STORM DRAIN INLETS, OPEN DRAINAGE FACILITIES, AND WATER COURSES. EACH FACILITY SHOULD BE LOCATED AWAY FROM CONSTRUCTION TRAFFIC OR ACCESS AREAS TO PREVENT DISTURBANCE OR TRACKING.
- 2. A SIGN SHOULD BE INSTALLED ADJACENT TO EACH WASHOUT FACILITY TO INFORM CONCRETE EQUIPMENT OPERATORS TO UTILIZE THE PROPER FACILITIES.
- 3. TEMPORARY CONCRETE WASHOUT FACILITIES SHOULD BE CONSTRUCTED ABOVE GRADE. TEMPORARY CONCRETE WASHOUT FACILITIES SHOULD BE CONSTRUCTED AND MAINTAINED IN SUFFICIENT QUANTITY AND SIZE TO CONTAIN ALL LIQUID AND CONCRETE WASTE GENERATED BY WASHOUT OPERATIONS.
- 4. TEMPORARY WASHOUT FACILITIES SHOULD HAVE A TEMPORARY PIT OR BERMED AREAS OF SUFFICIENT VOLUME TO COMPLETELY CONTAIN ALL LIQUID AND WASTE CONCRETE MATERIALS GENERATED DURING WASHOUT PROCEDURES.
- 5. WASHOUT OF CONCRETE TRUCKS SHOULD BE PERFORMED IN DESIGNATED AREAS ONLY.

<u>PLAN</u>

10' MIN

- 6. ONLY CONCRETE FROM MIXER TRUCK CHUTES SHOULD BE WASHED INTO CONCRETE WASH OUT.
- 7. ONCE CONCRETE WASTES ARE WASHED INTO THE DESIGNATED AREA AND ALLOWED TO HARDEN, THE CONCRETE SHOULD BE BROKEN UP, REMOVED, AND DISPOSED OF PER SOLID WASTE MANAGEMENT STANDARDS. DISPOSE OF HARDENED CONCRETE ON A REGULAR BASIS.

#### CONCRETE WASHOUT AREA

#### NO SCALE

### Tighe&Bond

-STAPLES (2

SECTION A-A

CONCRETE

WASHOUT

CONCRETE WASHOUT SIGN

STAPLE DETAIL

PER BALE)

WOOD OR METAL-

STRAW BALE

GRAVELED FILLED

BAGS IN CORNERS

PLYWOOD 4'-0" x-

2'-0" PAINTED

WHITE

STAKES (2 PER BALE)

ORIGINAL GROUND-

—10 ML PLASTIC LINING

-BLACK LETTERS

6" HEIGHT

—LAG SCREWS

-WOOD POST

 $(3\frac{1}{2}$ " x  $3\frac{1}{2}$ " x 8'-0")

(½")

-16 GAUGE STEEL

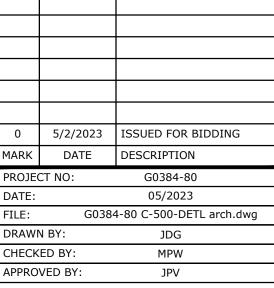
WIRE

## ISSUED FOR BIDDING

#### Maki Park Project

# Department of Community Development and Planning

Gardner, MA



SITE DETAILS - 1

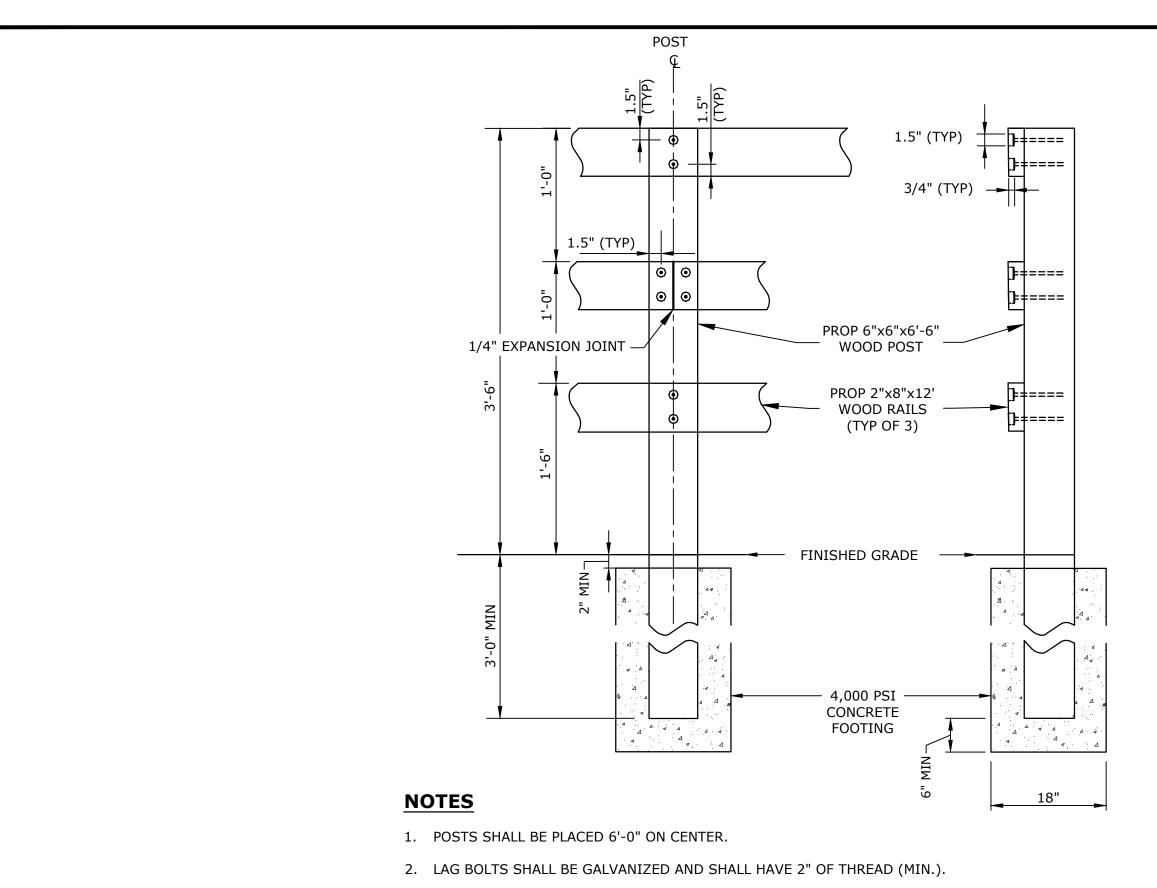
SCALE: AS SHOWN

C-501
SHEET 7 OF 13

CEMENT CONCRETE SIDEWALK

NO SCALE

Plotted On:May 02, 2023-1:29pm By: ABS Tighe & Bond:J:\G\G0384 Gardner\T80 - Maki F



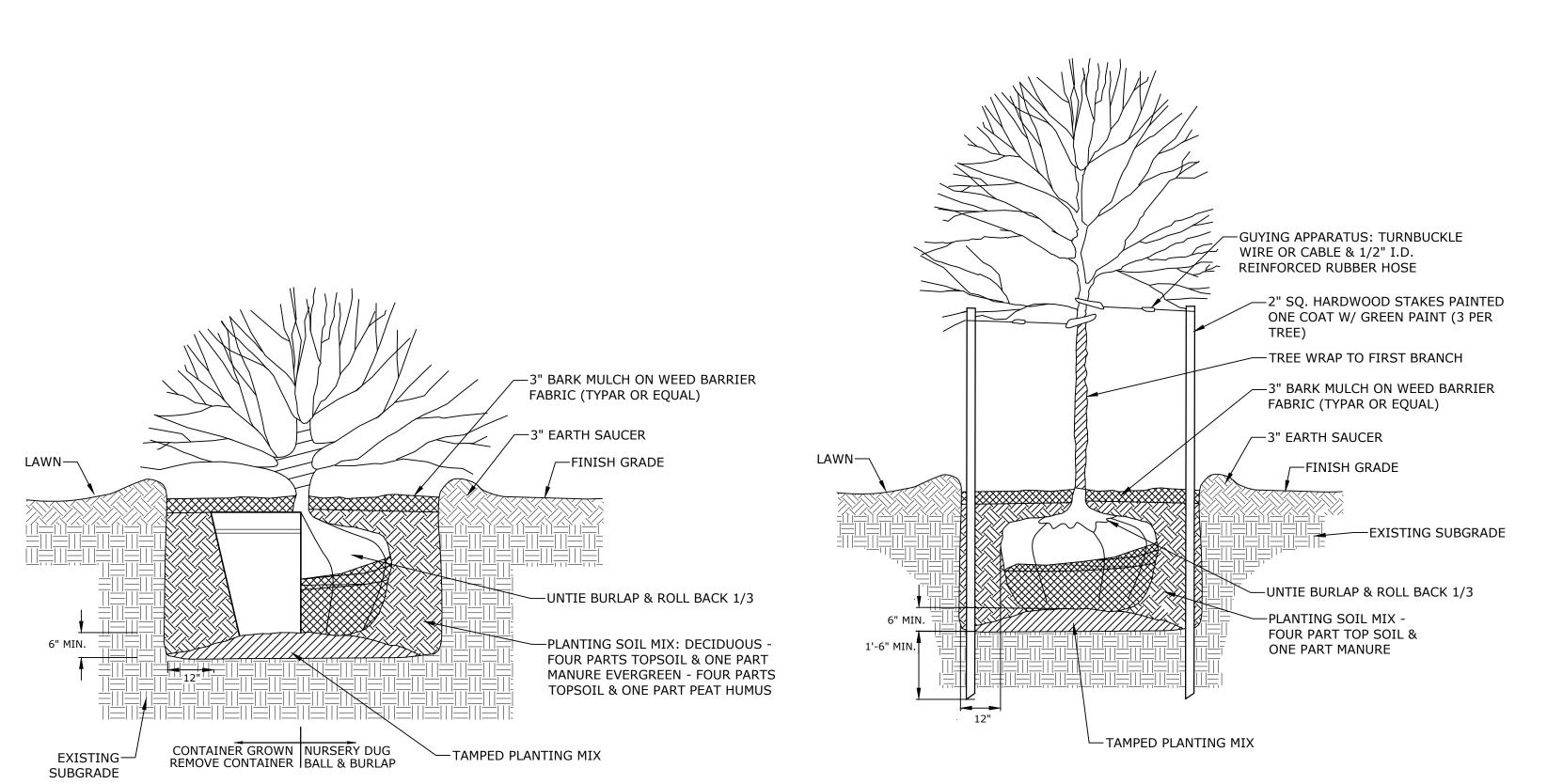
3. WASHERS SHALL BE 1" DIA. CUT STEEL, GALVANIZED.

**SHRUB PLANTING** 

NO SCALE

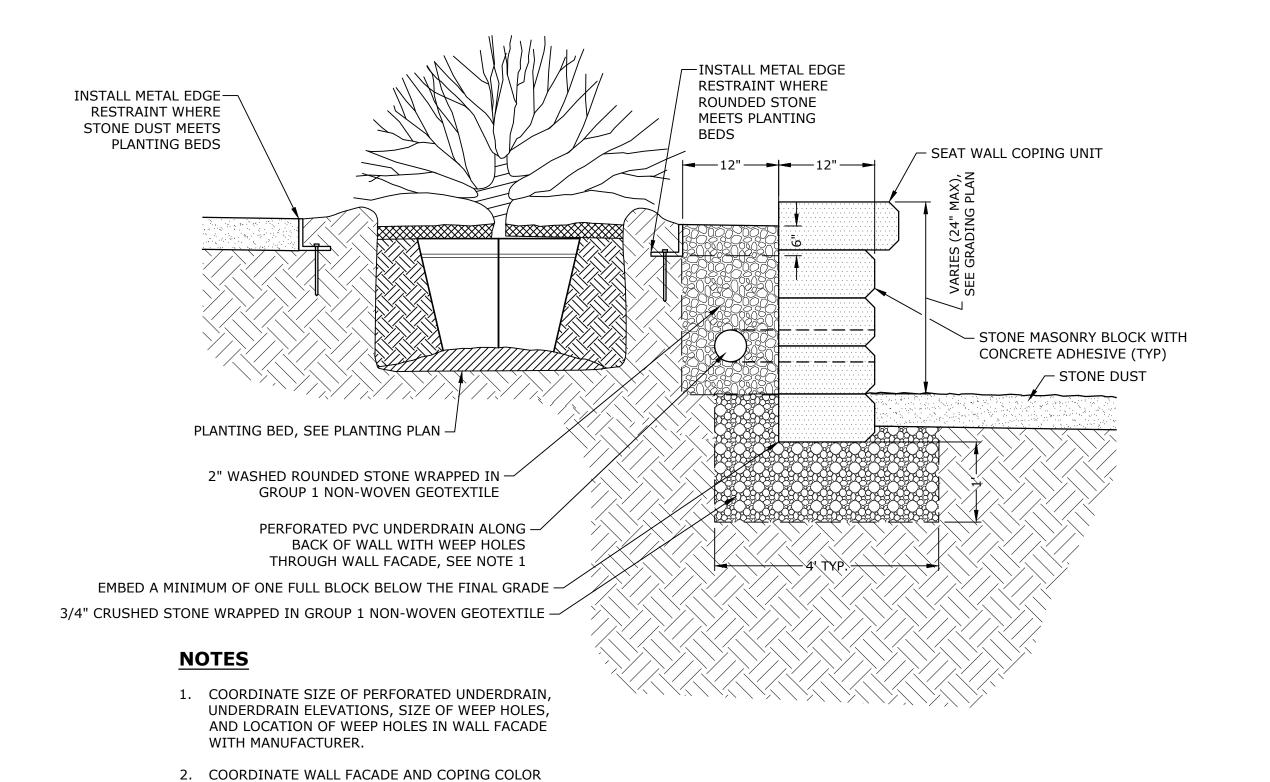
- 4. BURIED SECTIONS OF POSTS SHALL BE TREATED WITH A WOOD PRESERVATIVE AS APPROVED BY THE ENGINEER.
- 5. WOOD DIMENSIONS ARE NOMINAL TO MATCH COMMON INDUSTRY SIZES.

#### THREE RAIL WOOD FENCE NO SCALE



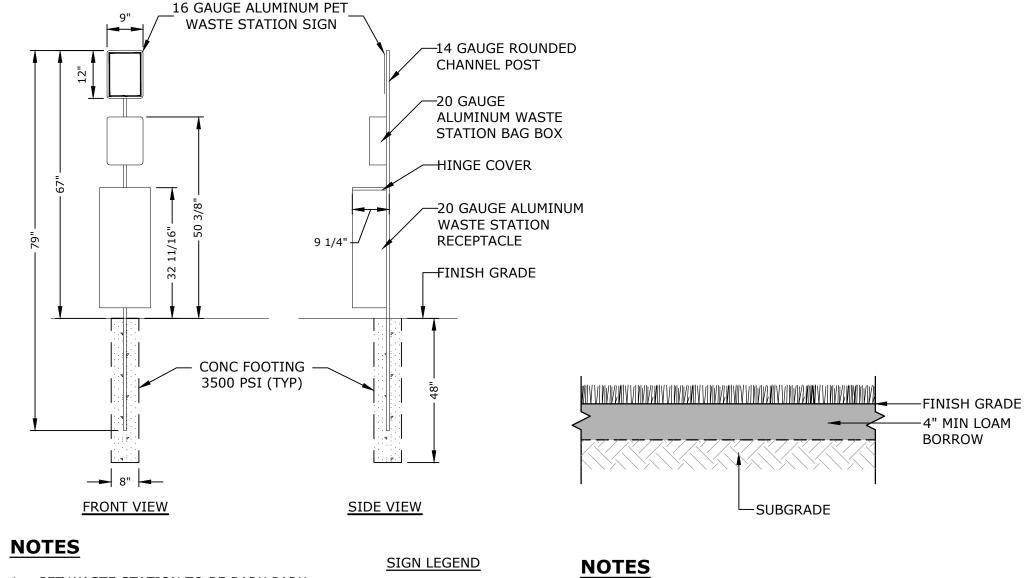
**DECIDUOUS TREE PLANTING** 

NO SCALE



#### **SEGMENTAL BLOCK RETAINING WALL SECTION**

AND FINISH TEXTURE WITH OWNER.



- 1. PET WASTE STATION TO BE BARK PARK MODEL BARK-490, OR APPROVED MODEL BY LIVIN THE DOG LIFE OR DOG ON IT PARKS.
- 2. ALL HARDWARE SHALL BE STAINLESS
- 3. WASTE STATION BAG BOX SHALL HOLD 2 BOXES OF 200 COUNT BAGS.
- 4. ALL COMPONENTS TO BE ELECTROSTATIC POWDER COATED, COLOR GREEN.

### PLEASE

PICK UP AFTER YOUR PET

1. APPLY SEED MIX AT A RATE OF 2 POUNDS PER 1,000 SQUARE FEET.

#### PET WASTE STATION NO SCALE

**GRASS LAWN AREA** 

NO SCALE

#### **ISSUED FOR BIDDING**

Tighe&Bond

#### | Maki Park Project

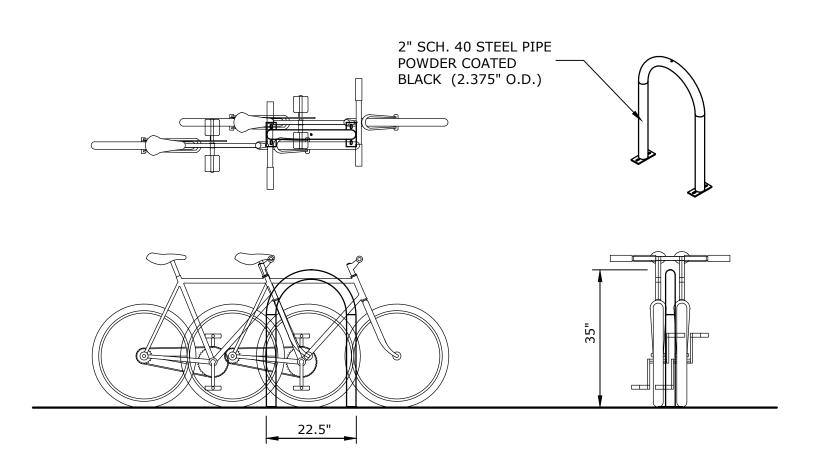
Department of Community Development and Planning

Gardner, MA

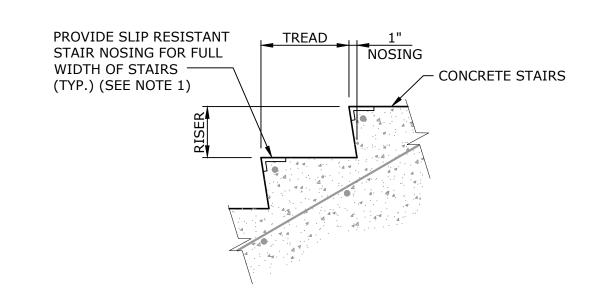
0	5/2/2023	ISSUED FOR BIDDING				
MARK	DATE	DESCRIPTION				
PROJE	CT NO:	G0384-80				
DATE:		05/2023				
FILE:	G0384	4-80 C-500-DETL arch.dwg				
DRAWI	N BY:	JDG				
CHECK	ED BY:	MPW				
APPRO	VED BY:	JPV				
SITE DETAILS - 2						
STIL DLIAILS - Z						

AS SHOWN SCALE:

> C-502 SHEET 8 OF 13



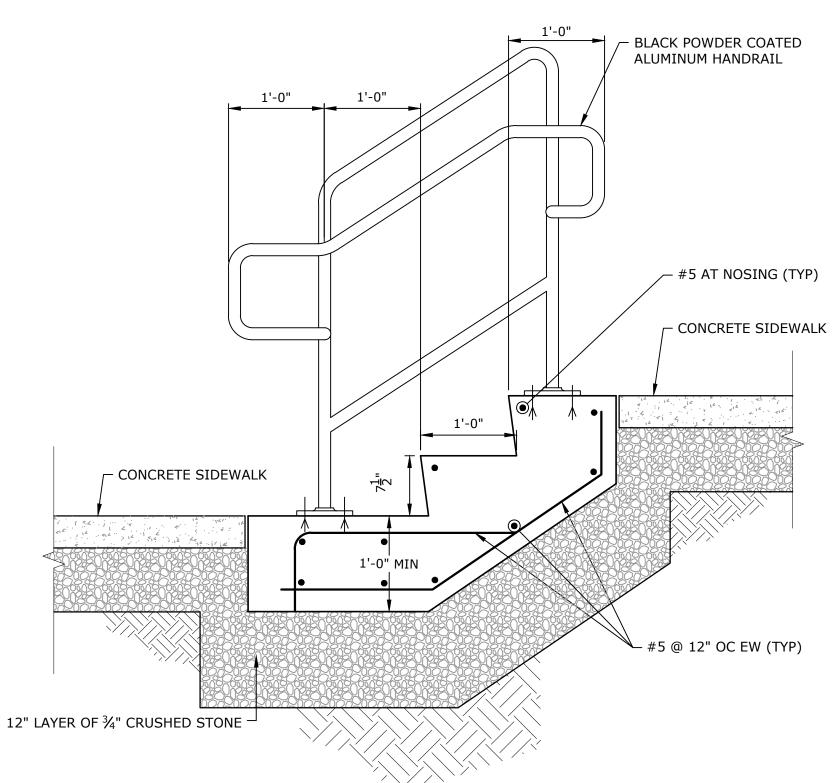
#### TYPICAL BIKE RACK



#### **NOTES:**

1. STAIR NOSINGS SHALL BE AMERICAN SAFETY TREAD STYLE 801 ALUMACAST OR EQUAL.

#### **CONCRETE STEP TREAD DETAIL** NO SCALE

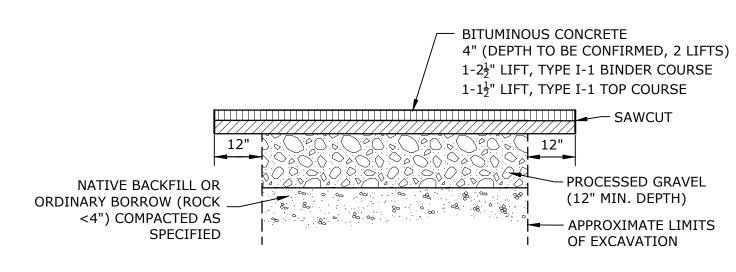


#### **NOTES:**

1. SEE PLAN FOR NUMBER OF STAIR TREADS.

**CONCRETE STEPS AND ALUMINUM HANDRAIL** 

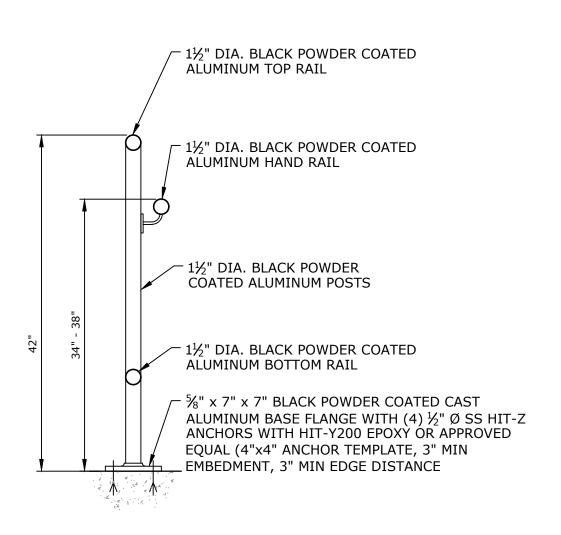
1" = 1'-0"



#### **NOTES:**

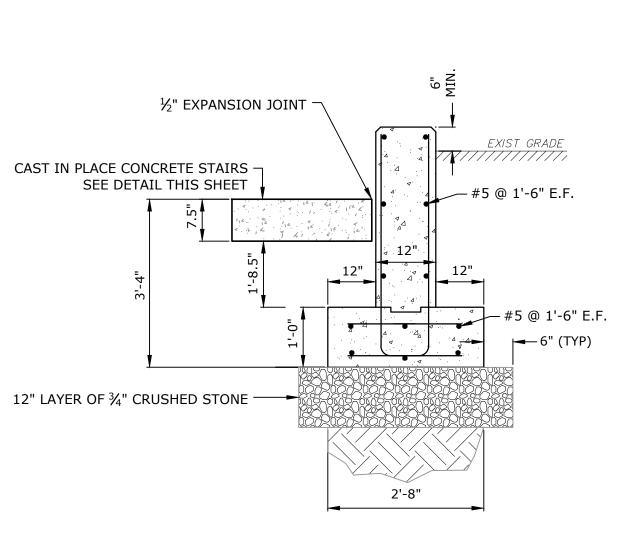
- 1. ANY ROUGH OR DAMAGED TRENCH EDGES SHALL BE SAWCUT CLEAN AND REPAVED.
- 2. PROVIDE ALL REQUIRED BACKUP MATERIAL (GRAVEL OR LOAM AND SEED) ALONG THE EDGES OF THE COMPLETED TOP COURSE.

#### PAVEMENT REPAIR DETAIL

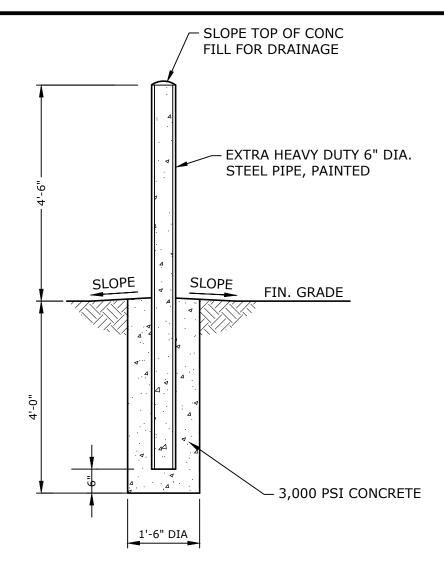


#### STAIR HANDRAIL DETAIL

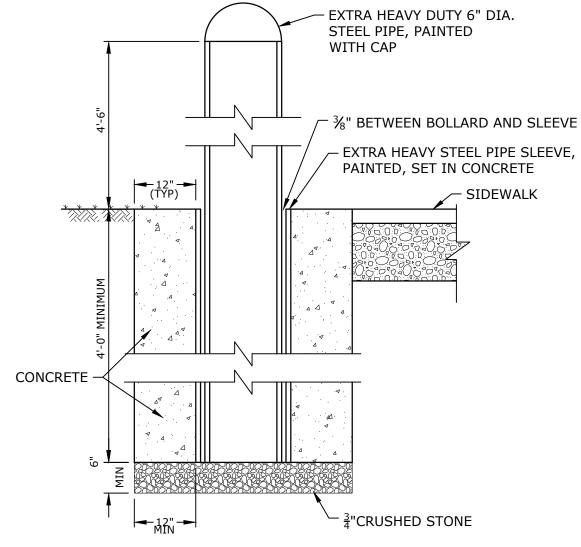
NO SCALE



**CAST-IN-PLACE CONCRETE RETAINING WALL** 



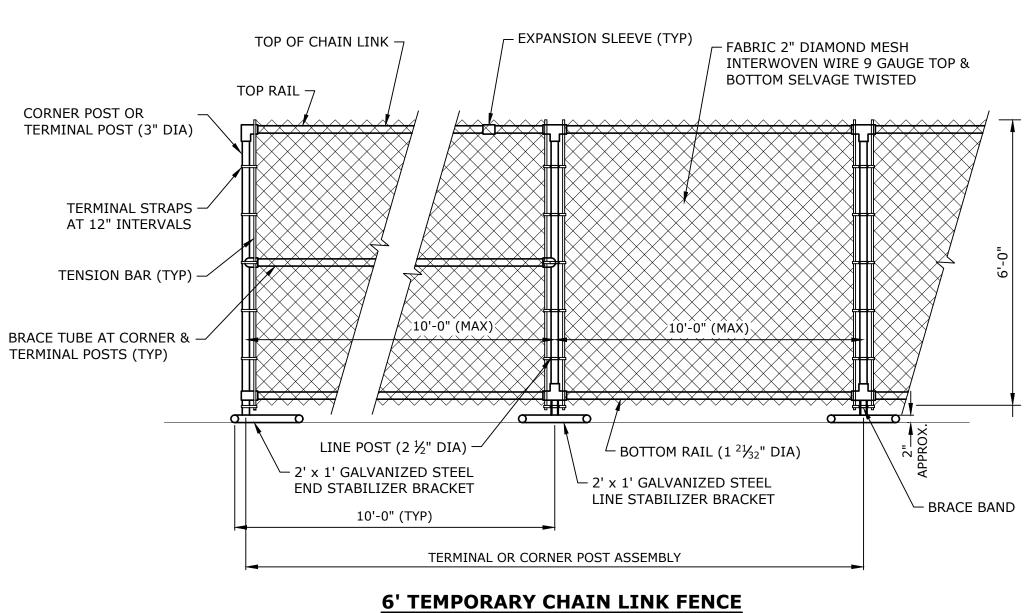
#### **6" DIAMETER** STEEL BOLLARD



#### **NOTES:**

- 1. PROVIDE INTERNAL LOCKING HARDWARE
- 2. PROVIDE LOCKING FILLER PIECE TO INSERT INTO EMPTY HOLE WHEN BOLLARD IS REMOVED

#### REMOVABLE BOLLARD DETAIL



NO SCALE

#### **ISSUED FOR BIDDING**

#### Maki Park Project

Department of Community Development and Planning

Gardner, MA

SCALE:

0	5/2/2023	ISSUED FOR BIDDING
MARK	DATE	DESCRIPTION
PROJECT NO:		G0384-80
DATE:	-	05/2023
DATE: FILE:		05/2023 4-80 C-500-DETL arch.dwg
	G0384	<u>'</u>
FILE:	G0384	4-80 C-500-DETL arch.dwg
FILE: DRAWI	G0384 N BY:	1-80 C-500-DETL arch.dwg JDG

C-503

AS SHOWN

#### **RACEWAYS AND WIRING** HOMERUN TO EQUIPMENT, RECEPTACLE OR LIGHTING. CONDUIT, CONCEALED IN CONSTRUCTION IN FINISHED AREAS, EXPOSED IN UNFINISHED AREAS UNDERGROUND CONDUIT (SHADING INDICATES CONCRETE ENCASED) NOTES: 1. GREEN GROUND CONDUCTOR NOT INDICATED BUT SHALL BE INCLUDED IN EACH RACEWAY. SIZE SHALL BE #12AWG UNLESS INDICATED OTHERWISE. 2. HOMERUNS TO PANELBOARDS SHALL HAVE A MAXIMUM OF THREE (3) PHASE CONDUCTORS (ONE PER PHASE), (3) NEUTRALS AND (3) GROUND CONDUCTORS IN EACH CONDUIT.

#### **MISCELLANEOUS ABBREVIATIONS** WIRE SIZE OR IDENTIFICATION NUMBER LIGHTING LOAD CENTER ENCLOSURE AFF ABOVE FINISHED FLOOR НН HANDHOLE CONDUIT СВ CIRCUIT BREAKER CIR, CKT CIRCUIT **GENERAL SITE NOTES** ELECTRICAL CONTRACTOR GROUND 1. ALL EXCAVATION, TRENCHING, BACK FILL AND COMPACTION OF DUCT BANKS, LIGHT LOADING CENTER PADS, BY THE GC. GC GENERAL CONTRACTOR 2. WHERE ROUTING IS SPECIFICALLY INDICATED, CONDUITS SHALL BE GFI, GFCI GROUND FAULT CIRCUIT INTERRUPTER ROUTED AS INDICATED ON THE DRAWING. NO EXCEPTION WITHOUT PRIOR WRITTEN PERMISSION FROM THE PROJECT ELECTRICAL HDPC HIGH DENSITY PLASTIC COMPOSITE ENGINEER. PVC POLYVINYL CHLORIDE 3. ALL CONCRETE WORK SHALL BE BY THE GC. RGS RIGID GALVANIZED STEEL CONDUIT SCH 40 SCHEDULE 40 PVC CONDUIT SW SWITCH TYPICAL UNDERGROUND WEATHER PROOF

#### **RECEPTACLES**

MOUNTED AT 18" AFF UNLESS OTHERWISE NOTED.

NUMBERS/LETTERS SHOWN BESIDE RECEPTACLES SHALL INDICATED THE FOLLOWING:

"GFI" INDICATES INTEGRAL GROUND FAULT INTERRUPTER.

"2" (NUMBER OR PANELBOARD NAME AND NUMBER) INDICATES POWER CIRCUIT NUMBER. "WP" INDICATES WATERPROOF.

DUPLEX RECEPTACLE.

#### **ISSUED FOR BIDDING**

#### Maki Park Project

Department of Community Development and Planning

Gardner, MA

0	5/2/2023	ISSUED FOR BIDDING
MARK	DATE	DESCRIPTION
PROJECT NO:		G0384-80
DATE:		05/2023
FILE:	G038	34-80 E-001 LEGEND.dwg

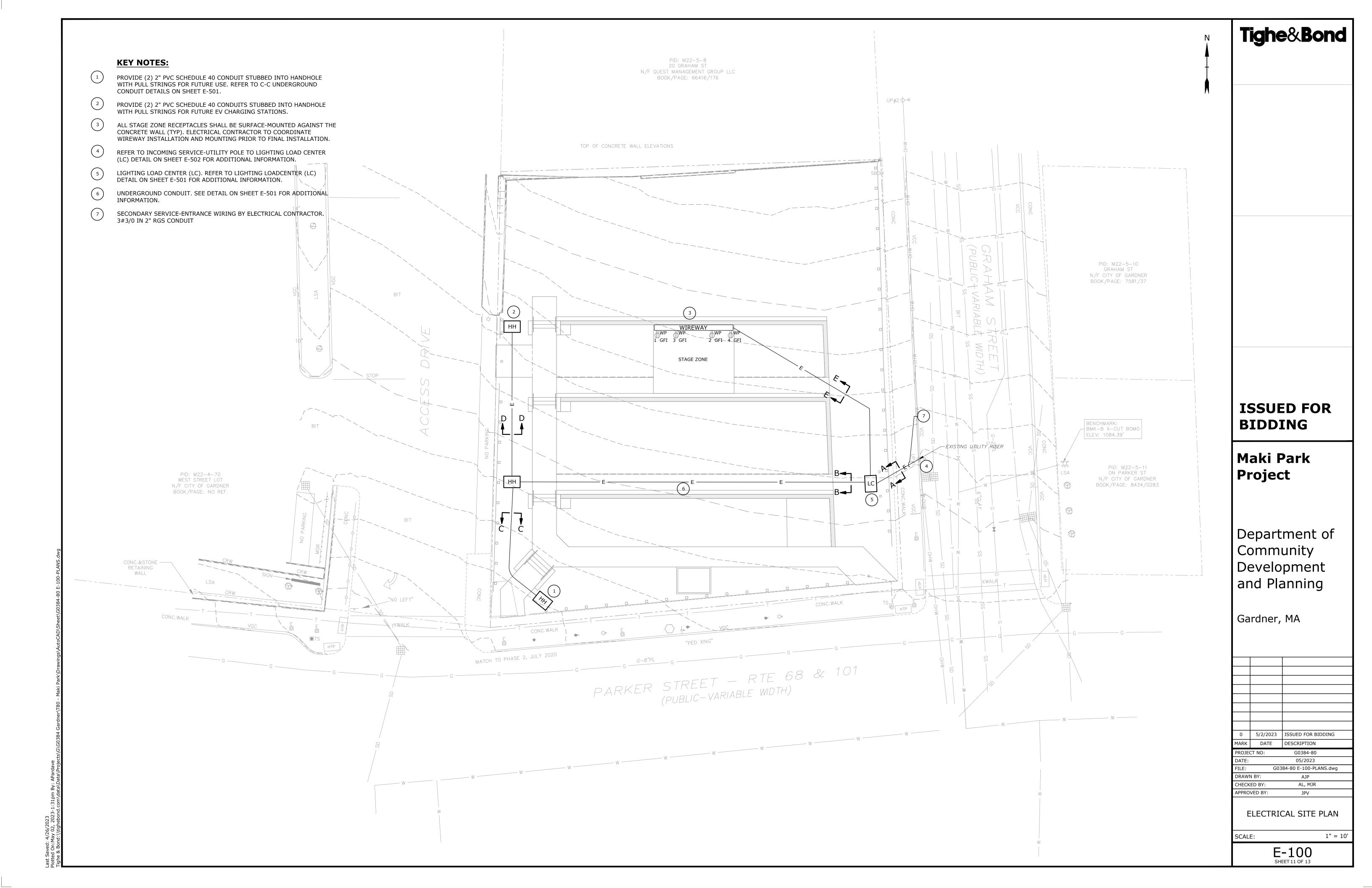
ELECTRICAL NOTES, LEGEND & ABBREVIATIONS

AJP AL, MJR

NO SCALE

CHECKED BY:

E-001 SHEET 10 OF 13



#### LIGHTING LOAD CENTER (LC) NO SCALE

#### NOTES - LIGHTING LOAD CENTER:

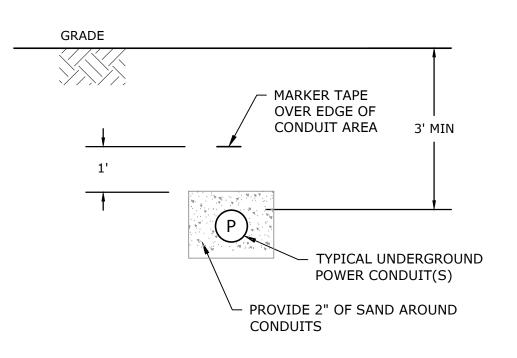
- 1. ENCLOSURE SHALL BE NEMA 3R ALUMINUM CONSTRUCTION. FINISH SHALL BE UNPAINTED ALUMINUM. SUBMIT ENCLOSURE EQUIPMENT (PANEL, METER SOCKET, ETC LAYOUT FOR APPROVAL BY ENGINEER PRIOR TO INSTALLATION).
- PROVIDE CLASS 200 SOCKET FOR ELECTRIC METER. ELECTRIC METER TO BE PROVIDED BY UTILITY COMPANY.
- LOCKABLE 200A NEMA 3R FUSED DISCONNECT SWITCH SERVICE ENTRANCE RATED.
- PROVIDE GROUNDING TRIAD AT SERVICE ENTRANCE RATED DISCONNECT SWITCH. SIZE OF GROUNDING ELECTRODE CONDUCTORS SHALL BE #2/0.
- TO HANDHOLE VIA B-B UNDERGROUND CONDUIT

		VOLTAGE (L-L):	240	PHASE:	1	WIRE:	3	VA,			840	PANEL N	Ο.	PP21		
		VOLTAGE (L-N):	120					VA,	L2	2,	880					
		MAIN BUS:	200	AMPS										Lighting Load Center (LC)		
		MAIN BREAKER:	200	A FRAM		200	A TRIP					NOTES:				
		MOUNTING:	SURFA	CE	kAIC:		ONE		AL VA	,	720	4				
	1	INCOMING FEEDER SIZE:	I		KI	EFER IC	ONE-L	INEL	JIAGRA	IVI	1			П		<b>I</b>
				VA LOAD	)							VA LOAD				
WIRE SIZE	CONDUIT SIZE	DIRECTORY	L1	L2		CKT.	AMPS		AMPS	CKT.	L2	L1		DIRECTORY	CONDUIT SIZE	WIRE SIZE
2#10 & 1#12G	2"	STAGE ZONE REC 1	1,400			1	20		20	2	1,440			STAGE ZONE REC 2	2"	2#10 & 1#120
2#10 & 1#12 <b>G</b>	2"	STAGE ZONE REC 3		1,440		3	20		20	4		1,440		STAGE ZONE REC 4	2"	2#10 & 1#12 <b>C</b>
-	-	FUTURE EV CHARGER 1				5	40		40	6				FUTURE EV CHARGER 2	-	-
-	-					7	40	1 [	40	8				[	-	-
-	-	FUTURE CONNECTIONS				9	20		20	10				FUTURE CONNECTIONS	-	-
-	-	FUTURE CONNECTIONS				11	20		20	12				FUTURE CONNECTIONS	-	-
-	-	FUTURE CONNECTIONS				13	20		20	14				FUTURE CONNECTIONS	-	=
-	-	FUTURE CONNECTIONS				15	20		20	16				FUTURE CONNECTIONS	-	-
-	-	FUTURE CONNECTIONS				17	20		20	18				SPARE	-	=
-	-	SPARE				19	20		20	20				SPARE	-	-
-	-	SPARE				21	20	1	20	22				SPARE	-	-
-	-	SPARE				23	20	]	20	24				SPARE	-	-
-	-	SPARE				25	20	1	20	26				SPARE	-	-
-	-	SPARE				27	20		20	28				SPARE	-	-
-	-	SPARE				29	20	1	20	30				SPARE	-	-
	<u> </u>	SUBTOTAL	1,400	1,440	0		<u> </u>				1,440	1,440	0	SUBTOTAL		

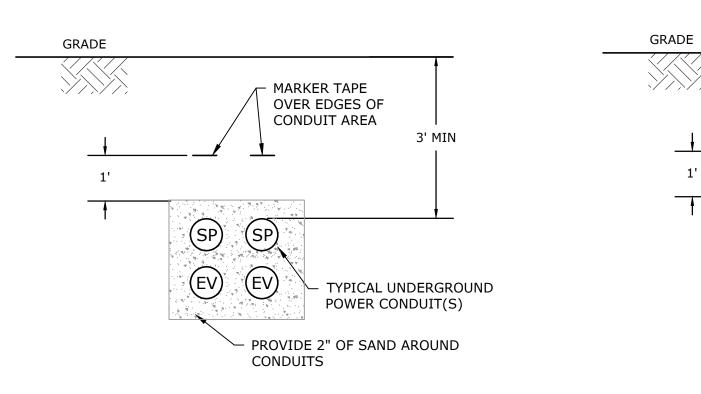
#### **PP21 PANELBOARD SCHEDULE**

#### NOTES:

1. THE ELECTRICAL CONTRACTOR SHALL NOT FEED MORE THAN (2) RECEPTACLE BRANCH CIRCUITS PER CONDUIT.



#### **SECTION "A-A"**



#### SECTION "C-C"

CONDUITS

- MARKER TAPE OVER EDGES OF

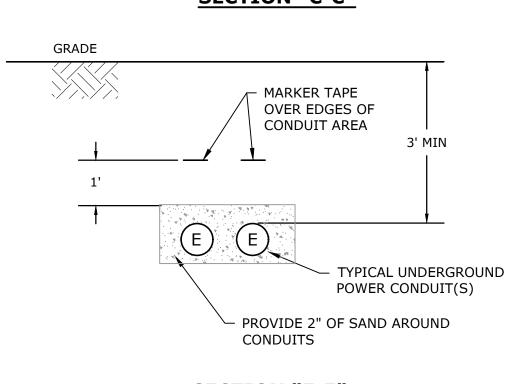
CONDUIT AREA

3' MIN

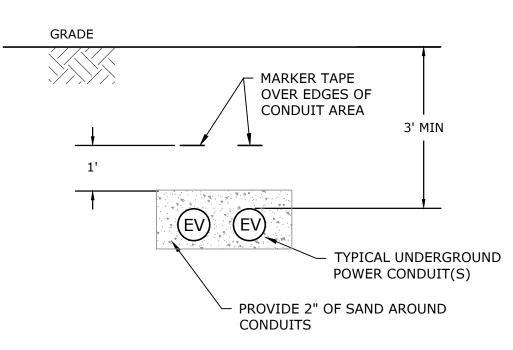
TYPICAL UNDERGROUND

POWER CONDUIT(S)

PROVIDE 2" OF SAND AROUND



#### **SECTION "B-B"**



#### SECTION "D-D"

#### SECTION "E-E"

#### NOTES:

- 1. MAINTAIN 3" MIN SPACING BETWEEN ALL POWER CONDUITS
- 2. MAINTAIN MINIMUM 1' SEPARATION BETWEEN ALL POWER CONDUITS AND OTHER UNDERGROUND SYSTEMS.
- P 2" RGS CONDUIT FOR INCOMING FEEDER
- (E) 2" SCH 40 PVC CONDUIT FOR RECEPTACLE WIRES
- (EV) 2" SCH 40 PVC CONDUIT FOR FUTURE EV CHARGERS
- SP SPARE 2" SCH 40 PVC CONDUIT

#### UNDERGROUND CONDUIT SECTIONS (DIRECT BURY) NO SCALE

# **ISSUED FOR**

Tighe&Bond

#### Maki Park Project

**BIDDING** 

#### Department of Community Development and Planning

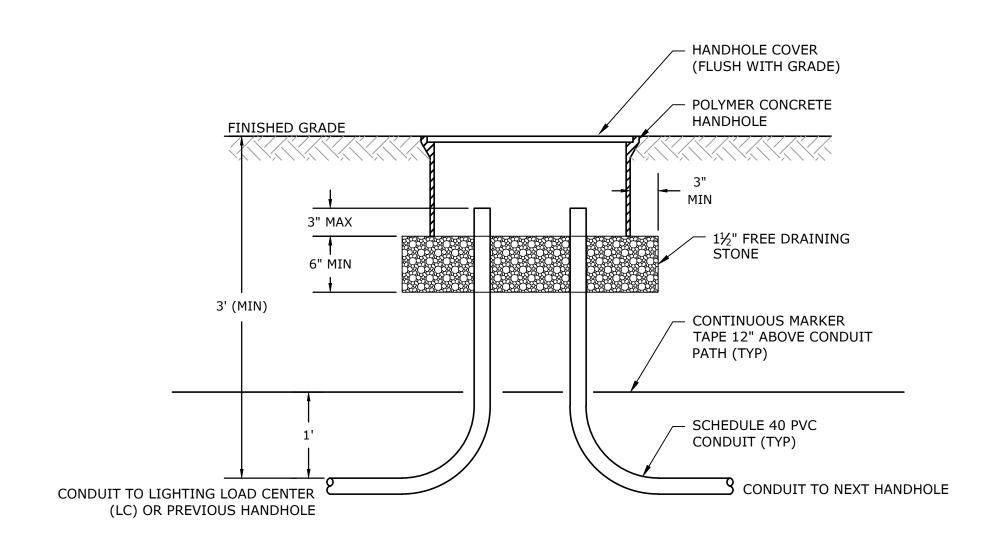
Gardner, MA

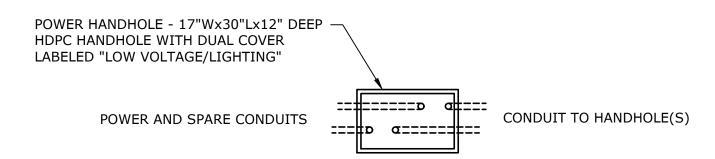
	5/2/2023	ISSUED FOR BIDDING				
RK	DATE	DESCRIPTION				
DJE	CT NO:	G0384-80				
ГЕ:		05/2023				
E:	G03	84-80 E-501 Details.dwg				
1WA	N BY:	AJP				
ECK	ED BY:	AL, MJR				
PRO	VED BY:	JPV				

ELECTICAL DETAILS - 1

E-501

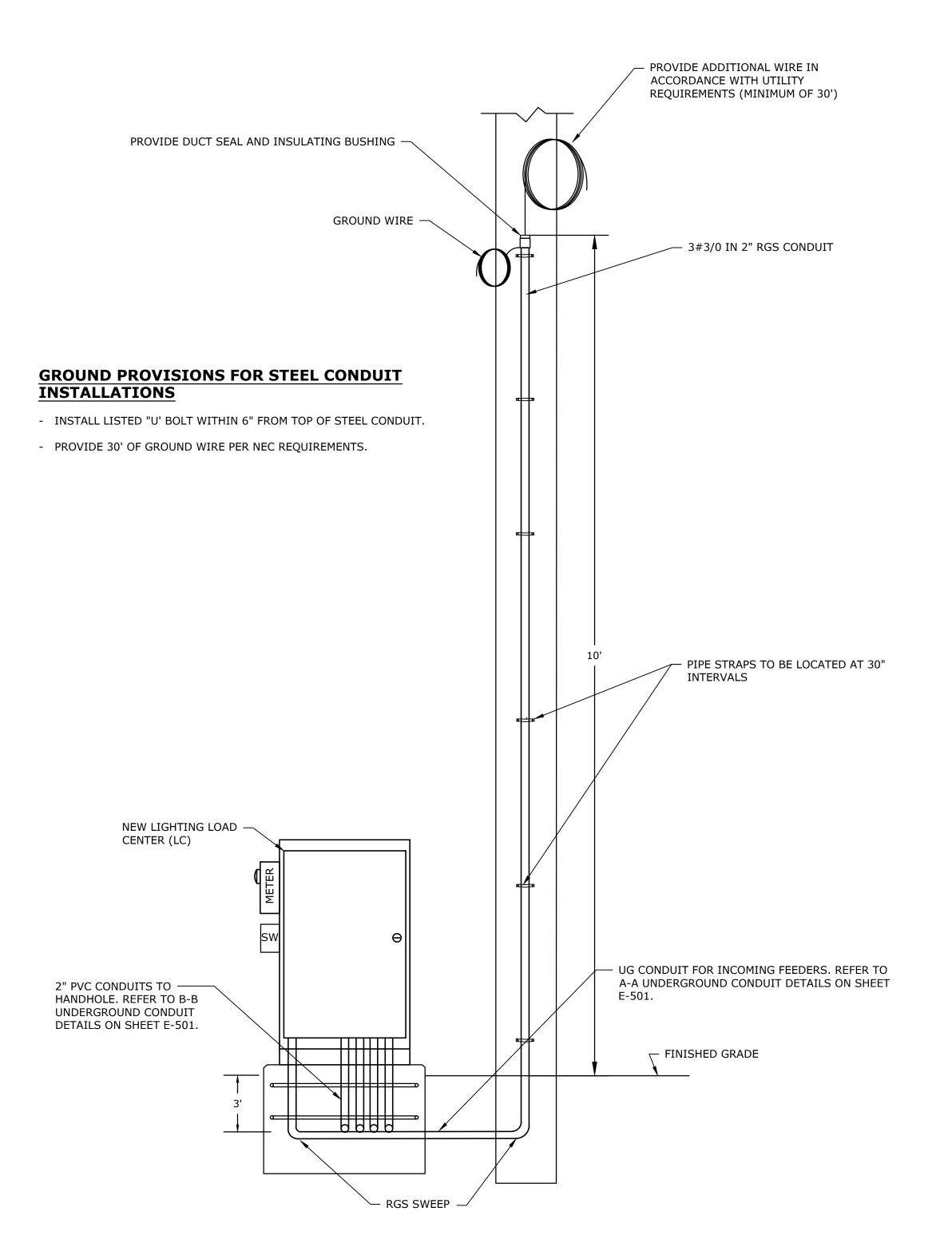
NO SCALE





#### **NOTES:**

- 1. COORDINATE WITH SITE ELECTRICAL PLANS. CONDUIT TYPES SHOWN ARE TYPICAL. PROVIDE CONDUIT ENTRIES AND QUANTITIES AS SHOWN ON SITE PLANS.
- 2. SPLICE CONDUCTORS (INCLUDING GROUNDING CONDUCTORS) IN HANDHOLE WITH SILICONE FILLED CONNECTORS RATED FOR UNDERGROUND. USE IDEAL #30-066 OR EQUAL FOR #6 OR SMALLER SPLICES. USE ILSCO PDSS OR EQUAL UNDERGROUND RATED LUGS FOR LARGER SPLICES.



#### INCOMING SERVICE - UTILITY POLE TO LIGHTING LOAD CENTER (LC) DETAIL

#### **NOTES:**

- 1. COORDINATE ALL REQUIREMENTS WITH UTILITY COMPANY.
- 2. PROVIDE SECONDARY SERVICE, COMPONENTS, CONDUCTORS, AND CONNECTIONS PER UTILITY STANDARDS.
- 3. THE ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR PROVIDING AND INSTALLING THE BOND CLAMPS AND THE TAP. THE UTILITY COMPANY WILL MAKE THE BOND CONNECTION FROM THE RISER BOND TAP TO THE GROUND SYSTEM POLE.
- 4. DETAIL IS FOR REFERENCE ONLY TO BE FINALIZED BY THE UTILITY COMPANY.

# ISSUED FOR BIDDING

#### Maki Park Project

Department of Community Development and Planning

Gardner, MA

0	5/2/2023	ISSUED FOR BIDDING
MARK	DATE	DESCRIPTION
PROJE	CT NO:	G0384-80
DATE:		05/2023
FILE:	G038	4-80 E-502 Details_B.dwg
DRAWI	N BY:	AJP
CHECK	ED BY:	AL, MJR

ELECTRICAL DETAILS - 2

JPV

SCALE: NO SCALE

APPROVED BY:

E-502 SHEET 13 OF 13