# **GOVERNING SPECIFICATIONS**

THE 2024 EDITION OF THE "IOWA STATEWIDE URBAN SPECIFICATIONS FOR PUBLIC IMPROVEMENTS" AND CITY OF 2024 SPECIFICATIONS.

MUTCD 2009 AS ADOPTED BY IOWA DEPARTMENT OF TRANSPORTATION

ALL APPLICABLE FEDERAL, STATE, AND LOCAL LAWS AND ORDINANCES WILL BE COMPLIED WITHIN THE CONSTRUCTION OF THIS PROJECT.



NOTE: EXISTING UTILITY INFORMATION SHOWN ON THIS PLAN HAS BEEN PROVIDED BY THE UTILITY OWNER. THE CONTRACTOR SHALL FIELD VERIFY EXACT LOCATIONS PRIOR TO COMMENCING CONSTRUCTION AS REQUIRED BY STATE LAW. NOTIFY IOWA ONE CALL 1-800-292-8989 OR 811

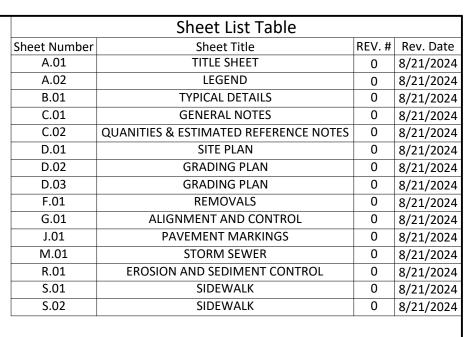
THE SUBSURFACE UTILITY INFORMATION IN THIS PLAN IS UTILITY QUALITY LEVEL D UNLESS OTHERWISE NOTED. THIS UTILITY LEVEL WAS DETERMINED ACCORDING TO THE GUIDELINES OF CI/ASCE 38-22, ENTITLED "STANDARD GUIDELINE FOR INVESTIGATING AND DOCUMENTING EXISTING UTILITIES".

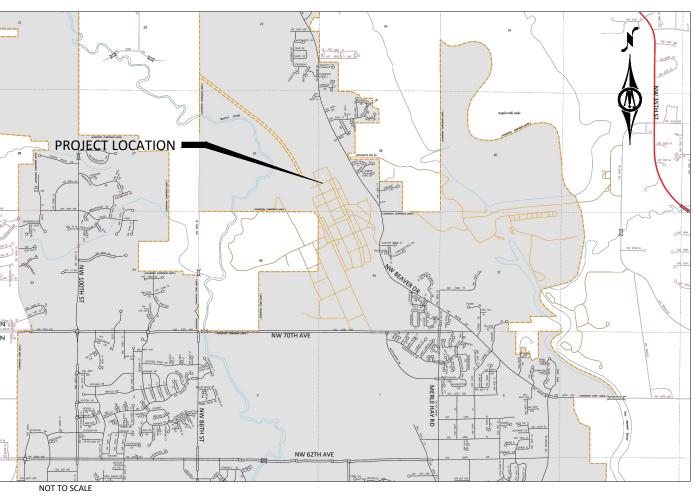
# IOWA DEPARTMENT OF PUBLIC DEFENSE

**CONSTRUCTION PLANS FOR** 

# M-2 PARKING LOT IMPROVEMENTS

PROJECT NO: 19083796 CONTRACT NO: 44SI293





MAP OF THE CITY OF JOHNSTON





HEREBY CERTIFY THAT THIS ENGINEERING DOCUMENT WAS PREPARED BY ME OR UNDER MY DIRECT PERSONAL SUPERVISION AND THAT I AM A DULY LICENSED PROFESSION LENGINEER UNDER THE TAYS OF THE STAPE OF IOWA.

JUST N L. ERNST, P.E.

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MY LICENSE RENEWAL DATE IS DECEMBER 31, 2022
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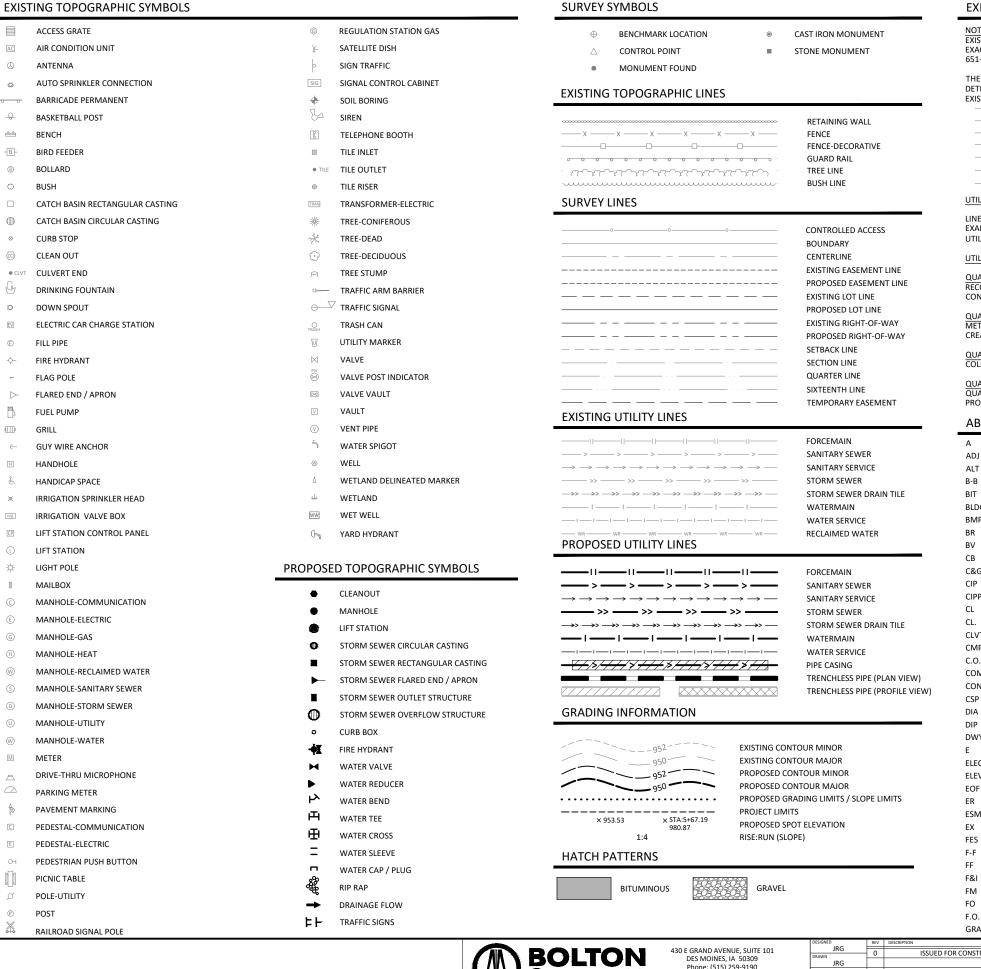
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BOLTON & MENK

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IOWA DEPARTMENT OF PUBLIC DEFENSE
M-2 PARKING LOT IMPROVEMENTS



# **EXISTING PRIVATE UTILITY LINES**

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THE SUBSURFACE UTILITY INFORMATION IN THIS PLAN IS UTILITY QUALITY LEVEL D UNLESS OTHERWISE NOTED. THIS UTILITY LEVEL WAS DETERMINED ACCORDING TO THE GUIDELINES OF CI/ASCE 38-22, ENTITLED "STANDARD GUIDELINE FOR INVESTIGATING AND DOCUMENTING

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### UTILITIES IDENTIFIED WITH A QUALITY LEVEL

LINE TYPES FOLLOW THE FORMAT: UTILITY TYPE - QUALITY LEVEL UNDERGROUND GAS, QUALITY LEVEL A UTILITY QUALITY LEVEL (A,B,C,D) DEFINITIONS CAN BE FOUND IN CI/ASCE 38-22.

### UTILITY QUALITY LEVELS:

QUALITY LEVEL D: PROVIDES THE MOST BASIC LEVEL OF INFORMATION. IT INVOLVES COLLECTING DATA FROM EXISTING UTILITY RECORDS. RECORDS MAY INCLUDE AS-BUILT DRAWINGS, DISTRIBUTION AND SERVICES MAPS, EXISTING GEOGRAPHIC INFORMATION SYSTEM DATABASES,

QUALITY LEVEL C: INVOLVES SURVEYING VISIBLE SUBSURFACE UTILITY STRUCTURES SUCH AS MANHOLES, HAND-HOLES, UTILITY VALVES AND METERS, FIRE HYDRANTS, PEDESTALS AND UTILITY MARKERS, AND THEN CORRELATING THE INFORMATION WITH EXISTING UTILITY RECORDS TO CREATE COMPOSITE DRAWINGS. INCLUDES QUALITY LEVEL D ACTIVITIES.

QUALITY LEVEL B: INVOLVES DESIGNATING THE HORIZONTAL POSITION OF SUBSURFACE UTILITIES THROUGH SURFACE DETECTION METHODS AND COLLECTING THE INFORMATION THROUGH A SURVEY METHOD. INCLUDES QUALITY LEVEL C AND D TASKS.

QUALITY LEVEL A: PROVIDES THE HIGHEST LEVEL OF ACCURACY. IT INVOLVES LOCATING OR POTHOLING UTILITIES AS WELL AS ACTIVITIES IN QUALITY LEVELS B, C, AND D. THE LOCATED FACILITY INFORMATION IS SURVEYED AND MAPPED AND THE DATA PROVIDES PRECISE PLAN AND PROFILE INFORMATION.

### **ABBREVIATIONS**

Α	ALGEBRAIC DIFFERENCE	GRAV	GRAVEL	RSC	RIGID STEEL CONDUIT
ADJ	ADJUST	GU	GUTTER	RT	RIGHT
ALT	ALTERNATE	GV	GATE VALVE	SAN	SANITARY SEWER
B-B	BACK TO BACK	HDPE	HIGH DENSITY POLYETHYLENE	SCH	SCHEDULE
BIT	BITUMINOUS	HH	HANDHOLE	SERV	SERVICE
BLDG	BUILDING	HP	HIGH POINT	SHLD	SHOULDER
BMP	BEST MANAGEMENT PRACTICE	HWL	HIGH WATER LEVEL	STA	STATION
BR	BEGIN RADIUS	HYD	HYDRANT	STD	STANDARD
BV	BUTTERFLY VALVE	1	INVERT	STM	STORM SEWER
СВ	CATCH BASIN	K	CURVE COEFFICIENT	TC	TOP OF CURB
C&G	CURB AND GUTTER	L	LENGTH	TE	TEMPORARY EASEMENT
CIP	CAST IRON PIPE	LO	LOWEST OPENING	TEMP	TEMPORARY
CIPP	CURED-IN-PLACE PIPE	LP	LOW POINT	TNH	TOP NUT HYDRANT
CL	CENTER LINE	LT	LEFT	TP	TOP OF PIPE
CL.	CLASS	MAX	MAXIMUM	TYP	TYPICAL
CLVT	CULVERT	MH	MANHOLE	VCP	VITRIFIED CLAY PIPE
CMP	CORRUGATED METAL PIPE	MIN	MINIMUM	VERT	VERTICAL
C.O.	CHANGE ORDER	MR	MID RADIUS	VPC	VERTICAL POINT OF CURVE
COMM	COMMUNICATION	NIC	NOT IN CONTRACT	VPI	VERTICAL POINT OF INTERSECTION
CON	CONCRETE	NMC	NON-METALLIC CONDUIT	VPT	VERTICAL POINT OF TANGENT
CSP	CORRUGATED STEEL PIPE	NTS	NOT TO SCALE	WM	WATERMAIN
DIA	DIAMETER	NWL	NORMAL WATER LEVEL		
DIP	DUCTILE IRON PIPE	OHW	ORDINARY HIGH WATER LEVEL		
DWY	DRIVEWAY	PC	POINT OF CURVE	AC	ACRES
E	EXTERNAL CURVE DISTANCE	PCC	POINT OF COMPOUND CURVE	CF	CUBIC FEET
ELEC	ELECTRIC	PE	PERMANENT EASEMENT	CV	COMPACTED VOLUME
ELEV	ELEVATION	PED	PEDESTRIAN, PEDESTAL	CY	CUBIC YARD
EOF	EMERGENCY OVERFLOW	PERF	PERFORATED PIPE	EA	EACH
ER	END RADIUS	PERM	PERMANENT	EV	EXCAVATED VOLUME
ESMT	EASEMENT	PI	POINT OF INTERSECTION	LB	POUND
EX	EXISTING	PL	PROPERTY LINE	LF	LINEAR FEET
FES	FLARED END SECTION	PRC	POINT OF REVERSE CURVE	LS	LUMP SUM
F-F	FACE TO FACE	PT	POINT OF TANGENT	LV	LOOSE VOLUME
FF	FINISHED FLOOR	PVC	POLYVINYL CHLORIDE PIPE	SF	SQUARE FEET
F&I	FURNISH AND INSTALL	PVMT	PAVEMENT	SV	STOCKPILE VOLUME
FM	FORCEMAIN	R	RADIUS	SY	SQUARE YARD
FO	FIBER OPTIC	R/W	RIGHT-OF-WAY		
F.O.	FIELD ORDER	RCP	REINFORCED CONCRETE PIPE		
GRAN	GRANULAR	RET	RETAINING		

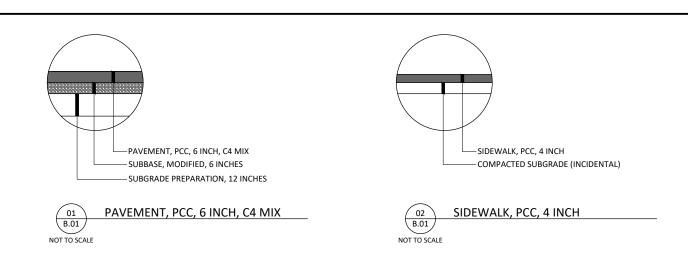
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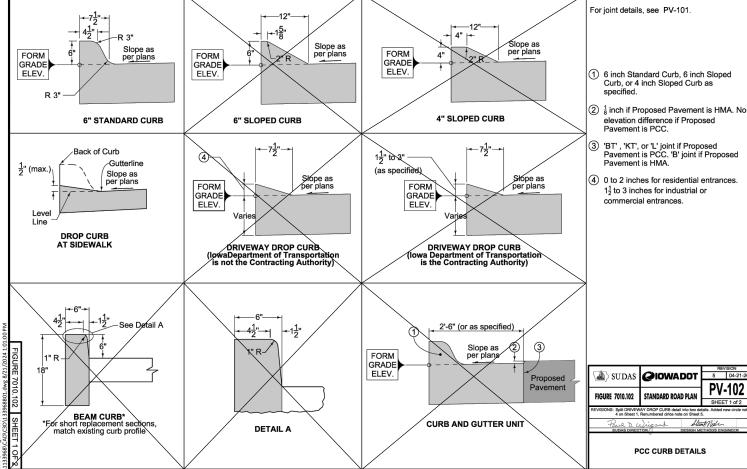
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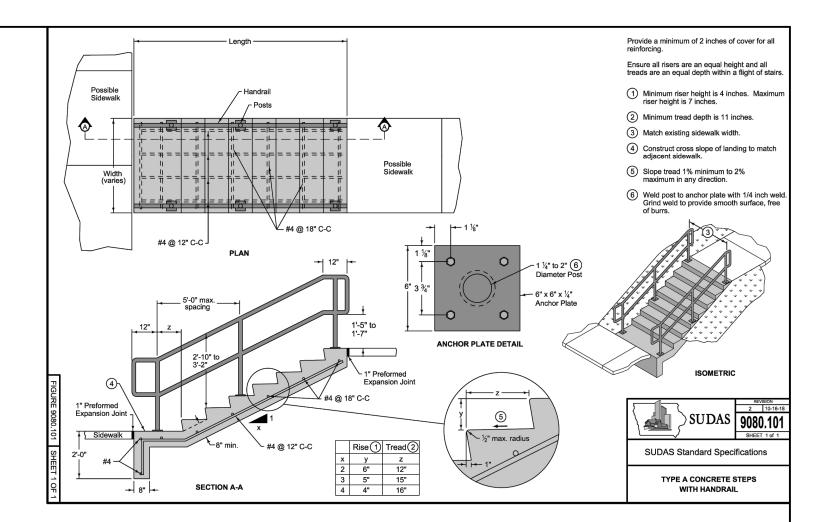
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PROJECT NO: 19083796

CONTRACT NO: 44SI293





430 E GRAND AVENUE, SUITE 101 DES MOINES, IA 50309 Phone: (515) 259-9190 Email: DesMoines@bolton-menk.com www.bolton-menk.com

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### **CONTROL OF WORK AND MATERIALS**

- THE CONTRACTOR SHALL KEEP A LEGIBLE COPY OF THE PLANS AND SPECIFICATIONS AT THE SITE OF WORK.
- THE CONTRACTOR SHALL AT ALL TIMES ABIDE BY ALL STATE, FEDERAL, AND LOCAL
- RULES, STATUTES AND CODE REGULATING THE TYPE OF WORK BEING DONE WORK SHALL BE GOVERNED BY IOWA STATEWIDE URBAN DESIGN AND SPECIFICATIONS (SUDAS), THE PLANS OR THE SPECIAL PROVISIONS.
- ALL PEDESTRIAN SIDEWALK RAMPS SHALL BE CONSTRUCTED IN COMPLIANCE WITH IADOT REQUIREMENTS AND SHALL MEET "AMERICANS WITH DISABILITIES ACT ACCESSIBILITIES GUIDELINES" (ADAAG) AND "PROPOSED ACCESSIBILITY GUIDELINES FOR PEDESTRIAN FACILITIES IN PUBLIC RIGHT-OF-WAY" (PROWAG) GUIDELINES. ANY RAMP NOT IN COMPLIANCE WILL NOT BE ACCEPTED AND WILL REQUIRE RECONSTRUCTION.

- THE CONTRACTOR SHALL NOTIFY THE OWNER FORTY-EIGHT (48) HOURS PRIOR TO THE START OF CONSTRUCTION.
- THE CONTRACTOR SHALL INDEMNIFY THE OWNER, THE ENGINEER, AND THE MUNICIPALITY, THEIR AGENTS, ETC., FROM ALL LIABILITY INVOLVED WITH THE CONSTRUCTION, INSTALLATION, AND TESTING OF THE WORK ON THIS PROJECT
- SITE SAFETY SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR THROUGH DURATION OF THE WORK.
- THE CONTRACTOR SHALL FURNISH AND ERECT NEAT AND SUBSTANTIAL FENCES OR BARRICADES AROUND ROADWAY OBSTRUCTIONS, SHAFTS, TRENCH CROSSINGS AND OTHER EXCAVATIONS AS PRESCRIBED BY LAW AND AS MAY BE FURTHER REQUIRED FOR THE PROTECTION OF THE PUBLIC AND OF THE WORK. THEY SHALL SUPPLEMENT SUCH PROTECTIVE FENCES OR BARRICADES BY THE USE OF ACCEPTABLE LIGHTS, FLAGS, WATCHMEN, SIGNS AND OTHER MEASURES THAT MAY BE NECESSARY TO FOR PROPER AND SUFFICIENT PROTECTION.
- 5. THE CONTRACTOR SHALL PROCURE ALL NECESSARY PERMITS AND LICENSES, PAY ALL CHARGES AND FEES, AND GIVE ALL NOTICES NECESSARY AND INCIDENT TO THE DUE AND LAWFUL PROSECUTION OF THE WORK.
- 6. COPIES OF ALL WRITTEN NOTICES AND PERMITS SHALL BE SUBMITTED TO THE OWNER PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
- 7. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING SOIL CONDITIONS PRIOR TO COMMENCEMENT OF CONSTRUCTION.
- 8. THE CONTRACTOR IS RESPONSIBLE FOR EXAMINING ALL SITE CONDITIONS PRIOR TO COMMENCEMENT OF CONSTRUCTION AND SHALL COMPARE FIELD CONDITIONS WITH
- THE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL PERMITS REQUIRED FOR EXECUTION OF THE WORK. THE CONTRACTOR SHALL CONDUCT HIS WORK ACCORDING TO THE REQUIREMENTS OF THE PERMITS.
- 10. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ACQUAINT THEMSELVES WITH THE LOCATION OF ALL UNDERGROUND STRUCTURES, SHOWN ON THE PLANS, OR GIVEN ON THE SITE. LOCATIONS ARE BASED UPON THE AVAILABLE RECORDS BUT ARE NOT GUARANTEED TO BE COMPLETE OR CORRECT AND ARE GIVEN ONLY TO ASSIST THE CONTRACTOR IN MAKING A DETERMINATION OF THE LOCATION OF ALL UNDERGROUND STRUCTURES.
- 11. PRIOR TO CONSTRUCTION, UNCOVER EXISTING UTILITIES AT CRITICAL LOCATIONS TO VERIFY EXACT HORIZONTAL AND VERTICAL LOCATION.
- 12 CONTRACTOR IS ADVISED THAT ALL MUD AND DERRIS MUST NOT BE DEPOSITED ONTO THE ADJACENT ROADWAYS PER THE REQUIREMENT OF THE MUNICIPALITY OR OTHER APPROPRIATE GOVERNMENT AGENCIES.
- ANY ADJACENT PROPERTIES OR ROAD RIGHTS-OF-WAY WHICH ARE DAMAGED DURING CONSTRUCTION MUST BE RESTORED BY THE CONTRACTOR. THE COST OF THE RESTORATION IS CONSIDERED INCIDENTAL WITH NO PAYMENT MADE BY THE OWNER
- 14. ALL MATERIALS NOT CONFORMING TO THE REQUIREMENTS OF THE CONTRACT DOCUMENTS SHALL BE CONSIDERED AS DEFECTIVE AND ALL SUCH MATERIALS WHETHER IN PLACE OR NOT, SHALL BE REJECTED AND SHALL BE REMOVED FORM THE WORK BY THE CONTRACTOR AT HIS EXPENSE. UPON FAILURE ON THE PART OF THE CONTRACTOR TO COMPLY WITH ANY ORDER OF THE ENGINEER RELATIVE TO THE PROVISIONS OF THIS ARTICLE, THE ENGINEER SHALL HAVE AUTHORITY TO REMOVE AND REPLACE SUCH DEFECTIVE MATERIAL AND TO DEDUCT THE COST OF REMOVAL AND REPLACEMENT FROM ANY MONIES DUE OR WHICH MAY BECOME DUE THE CONTRACTOR
- 15. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING SITE CLEANLINESS. UPON REQUEST BY THE ENGINEER, THE CONTRACTOR SHALL, AT ITS EXPENSE, CLEANUP AND REMOVE ALL REFUSE AND UNUSED MATERIALS OF ANY KIND RESULTING FROM THE WORK INCLUDING CLEANING AND SWEEPING OF ADJACENT STREETS, UPON FAILURE TO DO SO WITHIN THREE WORKING DAYS AFTER SUCH REQUEST BY THE ENGINEER, THE WORK MAY BE DONE BY THE JURISDICTION AND THE COST THEREOF CHARGED TOT HE CONTRACTOR AND DEDUCTED FROM ITS FINAL PAYMENT.
- 16. ALL SURFACE STRUCTURES AND FEATURES, INCLUDING BUILDINGS, PAVEMENTS, TREES, AND SHRUBS, ADJACENT TO THE CONSTRUCTION SHALL BE PROPERLY PROTECTED AGAINST DAMAGE.
- 17. IN THE EVENT OF DAMAGE OR INJURY TO ANY SURFACE OF SUBSURFACE STRUCTURE, THE CONTRACTOR WILL BE REQUIRED TO MAKE REPLACEMENTS OR REPAIRS TO THE SATISFACTION OF THE ENGINEER AT NO ADDITIONAL COST TO THE OWNER.
- 18. EXCEPTING THOSE LOT CORNERS AND SURVEY MONUMENTS WHICH FALL WITHIN THE TRENCH EXCAVATION, THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE PROTECTION AND/OR REPLACEMENT OF ALL SURVEY CORNERS WHICH EXIST THROUGHOUT THE WORK AREA. ANY SUCH DAMAGED CORNERS SHALL BE REPLACED BY A REGISTERED LAND SURVEYOR AT THE CONTRACTOR'S EXPENSE.
- 19. THE MEANS OF THE WORK AND THE SAFETY OF THE CONTRACTOR'S EMPLOYEES ARE SOLELY THE RESPONSIBILITY OF THE CONTRACTOR.
- 20. PROTECT EXISTING UTILITIES DURING CONSTRUCTION

- 21. SITE CLEAN-UP TO BE PERFORMED ON A DAILY BASIS. SIDEWALKS, PARKING LOTS, ROADWAYS, TEC, SHALL BE KEPT CLEAN AT ALL TIMES.
- 22. ANY WORK REQUIRED TO COMPLETE THE SCOPE OF THIS PROJECT BUT NOT SPECIFICALLY CALLED OUT IS TO BE CONSIDERED INCIDENTAL TO THE PROJECT. NO ADDITIONAL COMPENSATION TO BE ALLOWED FOR THE COMPLETION OF THIS WORK
- 23. NO PONDING OF WATER WILL BE ACCEPTED ON ANY NEW PAVEMENT OR OVERLAY AREAS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO IDENTIFY ANY AREAS OF EXISTING OR PROPOSED PAVEMENTS THAT HAVE POTENTIAL TO POND WATER AND MAKE ANY ADJUSTMENTS NECESSARY TO ENSURE THAT WATER WILL POSITIVELY DRAIN ACROSS THE PAVING OR OVERLAY.
- 24. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR THE COORDINATION OF WORK OF ALL SUBCONTRACTOR(S) INVOLVED IN THE PROJECT.
- 25. MATERIALS NOT SUITABLE FOR CONSTRUCTION, INCLUDING TRENCH BACKFILL AND SURFACE RESTORATION, AND EXCESS MATERIALS SHALL BE PROPERLY DISPOSED OF OFFSITE AT NO ADDITIONAL COST TO THE OWNER.

### TRAFFIC AND PEDESTRIAN CONTROL

- 1. CONTRACTOR TO COORDINATE ANY LANE OR STREET CLOSURES WITH THE OWNER AND OBTAIN ALL PERMITS.
- 2. IT IS THE CONTRACTORS RESPONSIBILITY TO CONTROL TRAFFIC DURING CONSTRUCTION AND PROVIDE ADEQUATE TRAFFIC AND PEDESTRIAN CONTROL AND
- 3. CONTRACTOR SHALL ASSUME PEDESTRIAN TRAFFIC WILL BE IN THE AREA THROUGHOUT THE PROJECT DURATION.
- CONTRACTOR TO COORDINATE CONSTRUCTION ACCESS, STAGING, AND PARKING AREAS WITH OWNER AND MINIMIZE IMPACTS TO SURROUNDING PROPERTIES.
- 5. SUITABLE PEDESTRIAN CROSSINGS AT LEAST FOUR FEET IN WIDTH SHALL BE PROVIDED AND MAINTAINED BY THE CONTRACTOR WHEN APPLICABLE.

### DEMOLITION

- 1. REMOVAL REQUIREMENTS SHOWN ON THE PLANS SHOULD BE CONSIDERED MINIMUM REMOVAL AND REPLACEMENT REQUIREMENTS. CONTRACTORS SHALL ADJUST REMOVAL LIMITS AND DIMENSIONS AS REQUIRED BY CONSTRUCTION MEANS AND METHODS AND ACTUAL SITE CONDITIONS. CONTRACTORS SHOULD FACTOR ADDITIONAL ANTICIPATED REMOVAL AND REPLACEMENT REQUIREMENTS INTO THEIR COST AS ADDITIONAL COMPENSATION REQUESTS FOR ADJUSTED OR EXPANDED REMOVAL LIMITS WILL NOT BE APPROVED.
- 2. CONTRACTOR SHALL REPLACE AT NO COST TO THE OWNER ALL DAMAGED STREETS, DRIVES, SIDEWALKS, CURB AND GUTTER, SIGNS, PAVEMENT MARKINGS, LIGHTS FENCES AND ALL OTHER SURFACE STRUCTURES NOT SCHEDULED TO BE REMOVED DURING THE COURSE OF THE WORK.
- 3. ALL LANDSCAPING INCLUDING TREES, SHRUBS, PERENNIALS NOT CALLED OUT TO BE REMOVED OR APPROVED FOR REMOVAL BY CONSTRUCTION MANAGER SHALL BE PROTECTED AND REPLACED AT NO COST TO THE OWNER IF DAMAGED DURING CONSTRUCTION. REPLACE TREES WITH (1) EQUIVALENT TREE UP TO 6" CALIPER AND (1) ADDITIONAL TREE FOR EVERY 6" CALIPER BEYOND THAT. ALL PLANTS THAT ARE DESTROYED OR DAMAGED SHALL BE REPLACED WITH NEW PLANTS OF THE EQUIVALENT TYPE.
- 4. WHERE A SECTION OF PAVEMENT, CURB AND GUTTER, OR SIDEWALK IS CUT OR OTHERWISE DAMAGED BY THE CONTRACTOR, THE ENTIRE SECTION SHALL BE REMOVED AND REPLACED. PAVEMENT, CURBS, GUTTERS, AND SIDEWALK SHALL BE REMOVED TO THE NEAREST JOINT A MINIMUM OF TWO FEET BEYOND THE EDGE OF ALL EXCAVATIONS, CONTRACTOR SHALL DOCUMENT (OR PHOTO) ALL CRACKED PCC PAVEMENT OR DAMAGED HMA PAVEMENT PRIOR TO CONSTRUCTION. IF NEW CRACKS IN PCC PAVEMENT DEVELOP OR HMA PAVEMENT IS DAMAGED DUE TO THE CONSTRUCTION ACTIVITY OR TRAFFIC (EXTENDS BEYOND CONSTRUCTION LIMITS) CONTRACTOR SHALL REPLACE DAMAGED AREA AT NO ADDITIONAL COST TO OWNER
- 5. FIRE PROTECTION ACCESS AND FIRE HYDRANTS SHALL BE MAINTAINED THROUGHOUT THE PROJECT. ALL EXISTING FIRE HYDRANTS WHICH ARE NOT CALLED OUT TO BE REMOVED SHALL BE PROTECTED AND MAINTAINED. AT THE REQUEST OF THE CONTRACTOR, SELECT EXISTING FIRE HYDRANTS MAY BE ALLOWED TO RE REMOVED TO BETTER ACCOMMODATE THE PROPOSED SITE IMPROVEMENTS. REQUESTS TO REMOVE EXISTING FIRE HYDRANT ASSEMBLIES SHOULD BE SUBMITTED AND APPROVED BY THE ENGINEER AND LOCAL JURISDICTION.
- 6. TREE AND VEGETATION INDICATED TO BE REMOVED SHALL BE REMOVED IN THEIR ENTIRETY INCLUDING ALL STUMPS AND ROOT STRUCTURES THAT ARE 2" DIAMETER AND LARGER. BACKFILL ALL EXCAVATIONS AND DEPRESSIONS WITH COMPACTED SUITABLE TOPSOIL MATERIAL

- THE CONTRACTOR SHALL MAINTAIN SITE DRAINAGE THROUGHOUT CONSTRUCTION
  THIS MAY INCLUDE THE EXCAVATION OF TEMPORARY DITCHES OR PUMPING TO ALLEVIATE WATER PONDING. THIS INCLUDES, BUT NOT LIMITED TO; DRAINAGE OFF SITE, DRAINAGE FROM ADJACENT PROPERTIES, DRAINAGE FROM ADJACENT BUILDINGS,
- 2. SILT FENCE AND OTHER EROSION CONTROL FACILITIES MUST BE INSTALLED PRIOR TO CONSTRUCTION OR ANY OTHER LAND DISTURBING ACTIVITY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING ALL EROSION CONTROL FACILITIES ONCE THE THREAT OF EROSION HAS PASSED WITH THE APPROVAL OF THE GOVERNING AGENCY.
- 3. THE CONTRACTOR SHALL ASSUME SOLE RESPONSIBILITY FOR THE COMPUTATIONS OF ALL GRADING AND FOR ACTUAL LAND BALANCE, INCLUDING UTILITY TRENCH SPOIL AND REQUIRED CONTAMINATED SOIL REMOVAL IF PRESENT (REFER TO REPORTS IF

- APPLICABLE). THE CONTRACTOR SHALL IMPORT OR EXPORT MATERIAL AS NECESSARY TO COMPLETE THE PROJECT.
- GRADING SHALL CONSIST OF CLEARING AND GRUBBING EXISTING VEGETATION STRIPPING TOPSOIL, REMOVAL OF THE EXISTING PAVEMENT OR FOUNDATIONS IMPORTING OR EXPORTING MATERIAL TO ACHIEVE AN ON-SITE EARTHWORK BALANCE, GRADING THE PROPOSED BUILDING PADS AND PAVEMENT AREAS, SCARIFYING AND FINAL COMPACTION OF THE PAVEMENT SUBGRADE, AND PLACEMENT OF TOPSOIL.
- 5. NO FILL SHALL BE PLACED ON A WET OR SOFT SUBGRADE. THE SUBGRADE SHALL BE PROOF-ROLLED AND INSPECTED BY THE ENGINEER BEFORE ANY MATERIAL IS PLACED.
- ALL FILL SHALL BE STRUCTURAL FILL AND SHALL BE PLACED IN ACCORDANCE WITH THE GEOTECHNICAL REPORT.
- 7. ALL SIDEWALKS SHALL NOT EXCEED THE MAXIMUM 2.0% CROSS SLOPE, CONTRACTOR

### **PAVING**

- PAVING SHALL CONSIST OF FINE GRADING PAVEMENT AREAS, INSTALLATION OF CRUSHED STONE BASE, CONCRETE AND / OR BITUMINOUS PAVEMENT, PAVEMENT MARKING, AND CLEANUP. ALL MATERIALS SHALL BE PROVIDED BY THE CONTRACTOR
- CONCRETE FOR CURB, DRIVEWAY, WALKS AND NON-FLOOR SLABS SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 4,000 PSI.
- ALL NON-DECORATIVE FINISHED CONCRETE SHALL BE COVERED WITH WHITE LIQUID CURING COMPOUND
- 4. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONSTRUCT SIDEWALKS TO CURRENT ADA AND PROWAG STANDARDS.
- CONTRACTOR SHALL SUBMIT A JOINTING PLAN PRIOR TO CONSTRUCTION OF ANY PAVED SURFACE.
- EXPANSION JOINT SHALL BE PLACED WHERE PCC SIDEWALK MEETS NEW WALK
- ALL SLOPES IN PAVEMENT SHALL BE UNIFORM TO AVOID PONDING. ANY PONDING ON PAVEMENT PATCHES OR ADJACENT TO PATCHES WILL BE CONSIDERED UNACCEPTABLE AND SHALL BE REPLACED.
- SALVAGE ALL SIGNS WITHIN THE CONSTRUCTION LIMITS AND REINSTALL IN THE SAME LOCATION AND CONDITION AFTER CONSTRUCTION. ANY STREET SIGNS OR POLES DAMAGED DURING THE COURSE OF WORK TO BE REMOVED AND REPLACED AT NO ADDITIONAL COST TO THE OWNER
- 9. FINAL PAVEMENT MARKINGS COLORS SHALL BE COORDINATED WITH OWNER.

### UTILITIES

### GENERAL

- 1. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE EXACT LOCATIONS AND DEPTHS OF ALL EXISTING PUBLIC AND PRIVATE UTILITIES AND WHETHER ADDITIONAL UTILITIES EXIST.
- 2. CONTRACTOR TO MODIFY EXISTING INVERTS TO ACCOMMODATE NEW PIPE CONNECTIONS.
- 3. ALL OPEN EXCAVATIONS SHALL BE PROTECTED WITH SAFETY FENCE, BARRIERS OR BARRICADES IN ACCORDANCE WITH OSHA
- CONTRACTOR TO IMPLEMENT TEMPORARY SHORING OR SUPPORT AT ALL UTILITY CROSSINGS AS REQUIRED BY CONTRACTORS MEANS AND METHODS. ALL DAMAGE TO EXISTING UTILITIES SHALL BE REPAIRED AT NO ADDITIONAL COST TO THE OWNER.
- EXTREME CAUTION MUST BE FOLLOWED REGARDING THE COMPACTION OF ALL UTILITY TRENCHES. MECHANICALLY COMPACTED GRANULAR BACKFILL IS REQUIRED UNDER & WITHIN 5 FEET OF ALL PAVEMENT INCLUDING SIDEWALKS. FLOODING OF BACKFILL MATERIAL IS NOT ALLOWED. THE COST OF THIS GRANULAR MATERIAL AND ITS COMPACTION IS CONSIDERED INCIDENTAL AND SHALL BE INCLUDED IN THE COST OF
- 6. UPON COMPLETION OF FINAL PAVING AND GRADING OPERATIONS. THE UTILITY CONTRACTOR SHALL ADJUST ALL MANHOLE AND INLET RIMS AND VALVE BOXES TO
- 7. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING THE OWNER WITH A SET OF MARKED-UP PRINTS SHOWING ALL CHANGES MADE DURING THE CONSTRUCTION PROCESS. ANY CHANGES TO THE DRAWINGS OR ADDITIONAL ITEMS MUST BE REPORTED TO THE OWNER.

- CONTRACTOR TO MAINTAIN MINIMUM 18" CLEARANCE WHEN WATER MAIN CROSSES ABOVE OR BELOW STORM SEWER.
- BEFORE PROCEEDING WITH ANY UTILITY CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE EACH EXISTING LATERAL OR POINT OF CONNECTION AND VERIFY THE LOCATION AND ELEVATION OF ALL UTILITIES. IF ANY EXISTING UTILITIES ARE NOT AS SHOWN ON THE DRAWINGS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY FOR POSSIBLE REDESIGN.
- CONTRACTOR IS RESPONSIBLE FOR VERIFYING REQUIRED CASTING IS COMPATIBLE WITH SPECIFIED STRUCTURE. IF NOT COMPATIBLE, CONTACT ENGINEER IMMEDIATELY
- STORM PIPE LENGTHS SHOWN ARE CENTERLINE TO CENTERLINE OF NEW STRUCTURES.
- ALL CONNECTIONS TO EXISTING MANHOLES SHALL BE CORED CONNECTIONS.

# MAINTENANCE, INSPECTIONS AND REPORTING

1. INLET PROTECTION SHALL BE REPLACED WHEN SEDIMENT COLLECTED IN THE DEVICE

- HAS REDUCED THE CAPACITY BY HALF. ACCUMULATED SEDIMENT SHALL BE DEPOSITED IN A SUITABLE AREA AND STABILIZED
- 2. SILT FENCES SHALL BE REPAIRED WHEN SEDIMENT HAS REACHED HALF THE HEIGHT OF THE FENCE, SILT FENCES HAVE A LIFE SPAN OF ONE YEAR, AND SHALL BE REPLACED. WHEN WORN OUT. DAMAGED OR DECOMPOSED FENCES, UNDERCUTTING, OR FLOW CHANNELS AROUND THE END OF BARRIERS SHALL BE REPAIRED OR CORRECTED.
- 3. SEEDED AREAS SHALL BE FERTILIZED. RESEEDED AND MULCHED AS NECESSARY, INSPECT SEEDED AREAS WEEKLY AFTER PLANTING TO ENSURE THAT VEGETATION IS ADEQUATELY ESTABLISHED. LIMIT VEHICLE TRAFFIC AND OTHER FORMS OF COMPACTION IN AREAS THAT ARE SEEDED.
- MULCH THAT IS DISPLACED SHALL BE REAPPLIED AND PROPERLY ANCHORED. MAINTENANCE SHALL BE COMPLETED AS SOON AS POSSIBLE WITH CONSIDERATION TO SITE CONDITIONS.
- 6. EROSION MATTING, SILT FENCES, IMPC, TEMPORARY DITCH CHECKS, STONE OUTLET PROTECTION, ETC. SHALL BE REPLACED AS NECESSARY.

### **EROSION CONTROL**

- 1. CONTRACTOR SHALL CONFORM TO ALL RELEVANT FEDERAL, STATE, AND LOCAL REGULATIONS; THE CONDITIONS INCLUDED IN ANY PERMIT; AND TO THE CONDITIONS INCLUDED IN THE PROJECT ENGINEER'S PLANS UNLESS OTHERWISE.
- AT NO TIME MAY CONSTRUCTION EQUIPMENT OR FILL BE PLACED IN A WATERWAY OR WETLAND. EXCEPT AS APPROVED BY DNR PERMIT. THE CONTRACTOR SHALL NOT STORE ANY EQUIPMENT OR MATERIALS IN ANY WETLAND, FLOODPLAIN, OR FLOODWAY.
- 3. PUBLIC AND PRIVATE ACCESS ROADS SHALL BE KEPT FREE OF TRACKED SEDIMENT AND AT A MINIMUM CLEANED AT THE END OF EACH WORKDAY (NOT BY FLUSHING). AS WELL, THE CONTRACTOR SHALL TAKE MINIMIZATION MEASURES FOR DUST CONTROL TO THE MAXIMUM EXTENT PRACTICABLE.
- 4. THE USE, STORAGE AND DISPOSAL OF CHEMICALS, OIL & GREASE, CEMENT AND OTHER COMPOUNDS AND MATERIALS LISED ON THE CONSTRUCTION SITE SHALL BE MANAGED DURING THE CONSTRUCTION PERIOD TO PREVENT THEIR TRANSPORT BY RUNOFF INTO WATERS OF THE STATE; IN THE EVENT OF ANY SPILL NOTIFICATION SHALL BE IMMEDIATELY REPORTED TO THE DNR AND LOCAL AUTHORITIES. ALL CONSTRUCTION DEBRIS AND LITTER SHALL BE CLEANED DAILY.
- IF THE CONTRACTOR DETERMINES THAT DEWATERING WILL BE NECESSARY, A DEWATERING PLAN SHALL BE SUBMITTED BY THE CONTRACTOR FOR APPROVAL NOTIFY THE DNR IF DEWATERING IS SCHEDULED TO OCCUR IN AREAS OF SOIL AND/OR GROUNDWATER CONTAMINATION. OR IF DEWATERING WILL OCCUR FROM A HIGH CAPACITY WELL (70 GPM OR GREATER). PROVIDE ANTI-SCOUR PROTECTION AND MAINTAIN NON-EROSIVE FLOW DURING DEWATERING.
- 6. DURING THE NON-GROWING SEASON, WINTER STABILIZATION SHALL INCLUDE SEEDING WITH DORMANT SEED MIX AND WINTER WHEAT AND THE USE OF MULCH AND POLYMER/TACKIFIER (AS AN ANCHORING METHOD) OR A EROSION MAT ON ALL BARE
- 6.1. MULCH SHALL CONSIST OF HAY OR STRAW FREE OF DISEASED PLANT RESIDUE, NOXIOUS WEEDS, HARMFUL CHEMICAL RESIDUES, HEAVY METALS, HYDROCARBONS, AND OTHER KNOWN ENVIRONMENTAL TOXICANTS
- MULCH SHALL COVER A MINIMUM OF 80% OF THE SOIL SURFACE AND SHALL BE  $rac{1}{2}$ TO 1 % INCHES THICK.
- IF THE CONDITIONS ARE TOO COLD TO APPLY A POLYMER/TACKIFIER, A MULCH CRIMPER OR BIODEGRADABLE NETTING SHALL BE USED AS A TEMPORARY ALTERNATE ANCHORING METHOD.
- 7. IF SNOW COVER PREVENTS THE INSTALLATION OF THESE ITEMS; THE CONDITION OF THE SITE, INCLUDING THE AMOUNT OF SNOW COVER, WILL BE NOTED ON EVERY EROSION AND SEDIMENT CONTROL INSPECTION REPORT. ONCE THE SNOW IS 2 INCHES OR LESS ON A MAJORITY OF THE SITE, THE ABOVE-MENTIONED WINTER STABILIZATION METHODS SHALL BE IMMEDIATELY EMPLOYED.
- 8. ALL FINISH GRADED DITCHES AND SWALES SHALL BE PLANTED, SODDED OR SEEDED AND MULCHED OR MATTED IMMEDIATELY AFTER COMPLETION.
- ALL LAND DISTURBING ACTIVITIES SHALL BE CONDUCTED IN A LOGICAL SEQUENCE AS TO MINIMIZE THE AMOUNT OF BARE SOIL EXPOSED AT ANY ONE TIME. MAINTAIN EXISTING VEGETATION AS LONG AS POSSIBLE.
- 10. ANY OFF-SITE SEDIMENT DEPOSITS SHALL BE CLEANED UP AND RESTORED OR STABILIZED WITH 24 HOURS, WEATHER PERMITTING, OF ANY OFF-SITE SEDIMENT DEPOSITION. ALL SEDIMENT SHALL BE PROPERLY DISPOSED OF AND STABILIZED IN AN UPLAND LOCATION ON OR OFF-SITE.
- 11. ALL WASH WATER (CONCRETE TRUCKS, VEHICLE CLEANING, EQUIPMENT CLEANING, ETC.) SHALL BE DETAINED AND PROPERLY TREATED OR DISPOSED.
- 12. SUFFICIENT OIL AND GREASE ABSORBING MATERIALS SHALL BE MAINTAINED ON SITE OR READILY AVAILABLE TO CONTAIN AND CLEAN-UP FUEL OR CHEMICAL SPILLS AND
- 13. DUST ON THE SITE SHALL BE CONTROLLED. THE USE OF MOTOR OILS AND OTHER PETROLEUM BASED OR TOXIC LIQUIDS FOR DUST SUPPRESSION OPERATIONS IS
- 14. RUBBISH, TRASH, GARBAGE, LITTER, OR OTHER SUCH MATERIALS SHALL BE DEPOSITED INTO SEALED CONTAINERS. MATERIALS SHALL BE PREVENTED FROM LEAVING THE PREMISES THROUGH THE ACTION OF WIND OR STORM WATER DISCHARGE INTO DRAINAGE DITCHES OR WATERS OF THE STATE OR ADJACENT PROPERTIES.
- 15. ALL MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLES ONTO ROADWAYS OR INTO STORM DRAINS MUST BE REMOVED IMMEDIATELY.
- 16. CONTRACTORS OR SUBCONTRACTORS WILL BE RESPONSIBLE FOR REMOVING SEDIMENT THAT MAY HAVE COLLECTED IN THE STORM SEWER DRAINAGE SYSTEMS IN CONJUNCTION WITH THE STABILIZATION OF THE SITE.
- 17. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADJUSTING THE EROSION CONTROL MEASURES (SILT FENCES, WATTLES, INLET PROTECTION, ETC.) TO PREVENT EROSION.

PROJECT NO: 19083796 CONTRACT NO: 44SI293



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DESIGNED	REV	DESCRIPTION	DATE	Ī
JRG	n	ISSUED FOR CONSTRUCTION	8/21/2024	
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		ESTIMATED PROJECT QUANTITIES - BASE BID			
ITEM NO.	ITEM CODE	ITEM	UNIT	QUANTITY	AS-BUILT QTY
1	2010-D-1	TOPSOIL, ON-SITE	CY	23	
2	2010-E	EXCAVATION, CLASS 10	CY	126	
3	2010-G	SUBGRADE PREPARATION	SY	1442	
4	2010-J	SUBBASE, MODIFIED, 6 INCHES	SY	1442	
5	4020-A-1	STORM SEWER, TRENCHED, RCP, 12 INCH	LF	157	
6	4020-D	REMOVAL OF STORM SEWER, RCP, 12 INCH	LF	13	
7	6010-B	INTAKE, SW-511	EA	1	
8	6010-B	INTAKE, SW-512	EA	1	
9	6010-H	REMOVE MANHOLE	EA	1	
10	6010-H	REMOVE FLARED END SECTION	EA	2	
11	7010-A	PAVEMENT, PCC, 6 INCH, C4 MIX	SY	1389	
12	7030-A-1	REMOVAL OF SIDEWALK	SY	27	
13	7030-E	SIDEWALK, PCC, 4 INCH	SY	49	
14	7040-H	PAVEMENT REMOVAL	SY	903	
15	8020-B	PAINTED PAVEMENT MARKINGS, SOLVENT/WATERBORNE	STA	10	
16	8020-G	PAINTED SYMBOLS AND LEGENDS, DURABLE	EA	2	
17	8030-A	TEMPORARY TRAFFIC CONTROL	LS	1	
18	8040-B	TRAFFIC SIGNS	EA	2	
19	9010-B	HYDRAULIC SEEDING, SEEDING, FERTILIZING, AND MULCHING, TYPE 1 - PERMANENT LAWN	AC	0.1	
20	9040-F-1	WATTLE, STRAW, 9 INCH	LF	650	
21	9040-Q-2	EROSION CONTROL MULCHING, HYDRO MULCHING, WOOD CELLULOSE	AC	0.1	
22	9040-T-1	INLET PROTECTION DEVICE, DROP-IN	EA	3	
23	9080-A	CONCRETE STEPS	SF	45	
24	9080-B	HANDRAIL, POWDER COATED	LF	12	
25	10010-A	DEMOLITION WORK	LS	1	
26	11010-A	CONSTRUCTION SURVEY	LS	1	
27	11020-A	MOBILIZATION	LS	1	
28	11050-A	CONCRETE WASHOUT	LS	1	

		ESTIMATE REFERENCE INFORMATION
ITEM NO.	ITEM CODE	DESCRIPTION
1	2010-D-1	TOPSOIL, ON-SITE  TOPSOIL WITHIN THE GRADING LIMITS OF THE PROJECT SHALL BE STRIPPED TO A DEPTH OF 2", SALVAGED, AND RESPREAD AT A MINIMUM DEPTH OF 6". ITEM INCLUDES HAULING OFF-SITE TO STORE AND HAULING BACK IN IF NEEDED. SALVAGED TOPSOIL SHALL REMAIN WITHIN THE RIGHT-OF-WAY UNLESS AGREEMENTS MADE WITH THE PROPERTY OWNER. CONTRACTOR TO PAY FOR RESTORATION COST IF LOCATED OUTSIDE OF THE RIGHT OF WAY. EXCESS TOPSOIL SHALL BE WASTED ON EMBANKMENTS OR HAULED OFF AS DETERMINED BY THE EINGINEER. THIS ITEM WILL BE PAID OUT TO PLAN QUANTITY.
2	2010-E	EXCAVATION, CLASS 10  THIS ITEM SHALL INCLUDE THE REMOVAL OF EXISTING SOIL, HAULING, DISPOSAL/EXPORT AND RE-GRADING AS PER PLAN TO FACILITATE ALL PROPOSED SECTIONS. ALL BORROW SHALL BE PROVIDED BY THE CONTRACTOR. EXCESS OR UNSUITABLE EXCAVATED MATERIAL WILL BECOME PROPERTY OF THE CONTRACTOR AND WILL BE HAULED OFF-SITE INCIDENTAL TO THE ITEM. NO ADDITIONAL PAYMENT WILL BE ALLOWED FOR OVERHAUL OF WASTE. TOPSOIL SHALL BE PLACED AND SPREAD TO A MINIMUM THICKNESS OF 6" IN ALL DISTURBED TURF AREAS AND PAID FOR AS TOPSOIL, ON-SITE. RAW CUT = 80 CY, ADJUSTED FILL (1.15 FACTOR) = 126 CY RAW EARTHWORK QUANTITIES ARE FOR INFORMATIONAL PURPOSES ONLY ARE A COMPARISON OF EXISTING CONDITIONS AND PROPOSED CONDITIONS AND MAY INCLUDE MATERIALS AND OPERATIONS PAID FOR UNDER OTHER BID ITEMS E.G. PAVEMENT REMOVAL, STORM SEWER TRENCHED, PCC PAVEMENT, SUBBASE, TOPSOIL, COMPOST AMENDMENT, ETC. MEASUREMENT WILL NOT BE MADE AND QUANTITY PAID WILL BE ON A PERCENT OF ITEM COMPLETE.
3	2010-G	SUBGRADE PREPARATION  WORK INCLUDES, BUT IS NOT LIMITED TO, EXCAVATING, MANIPULATING, REPLACING, COMPACTING, AND TRIMMING TO THE PROPER GRADE.
4	2010-J	SUBBASE, MODIFIED, 6 INCHES THIS ITEM INCLUDES, BUT IS NOT LIMITED TO, COMPACTION OF SUBGRADE, FURNISHING, PLACING, COMPACTING, AND TRIMMING TO THE PROPER GRADE.
5	4020-A-1	STORM SEWER, TRENCHED, RCP, 12 INCH  UNIT PRICE INCLUDES, BUT IS NOT LIMITED TO, TRENCH EXCAVATION; DEWATERING; FURNISHING AND INSTALLING PIPE; FURNISHING, PLACING, AND COMPACTING BEDDING AND BACKFILL MATERIAL; JOINT WRAPPING; PIPE JOINTS; PIPE CONNECTIONS; TESTING; AND INSPECTION.
6	4020-D	REMOVAL OF STORM SEWER, RCP, 12 INCH UNIT PRICE INCLUDES, BUT IS NOT LIMITED TO, REMOVAL AND DISPOSAL OF PIPE
7	6010-B	INTAKE, SW-511  UNIT PRICE INCLUDES, BUT IS NOT LIMITED TO, EXCAVATION; FURNISHING AND INSTALLING PIPE; FURNISHING, PLACING, AND COMPACTING BEDDING AND BACKFILL MATERIAL; BASE; STRUCTURAL CONCRETE; REINFORCING STEEL; PRECAST UNITS (IF USED); CONCRETE FILLETS; PIPE CONNECTIONS; CASTINGS; AND ADJUSTMENT RINGS.

8	6010-B	INTAKE, SW-512  UNIT PRICE INCLUDES, BUT IS NOT LIMITED TO, EXCAVATION; FURNISHING AND INSTALLING PIPE; FURNISHING, PLACING, AND COMPACTING BEDDING
		AND BACKFILL MATERIAL; BASE; STRUCTURAL CONCRETE; REINFORCING STEEL; PRECAST UNITS (IF USED); CONCRETE FILLETS; PIPE CONNECTIONS; CASTINGS; AND ADJUSTMENT RINGS.
9	6010-H	REMOVE MANHOLE
		UNIT PRICE INCLUDES, BUT IS NOT LIMITED TO, REMOVAL OF CASTING, CONCRETE, AND REINFORCEMENT.
10	6010-H	REMOVE FLARED END SECTION
		UNIT PRICE INCLUDES, BUT IS NOT LIMITED TO, REMOVAL OF CASTING, CONCRETE, AND REINFORCEMENT.
11	7010-A	PAVEMENT, PCC, 6 INCH, C4 MIX
		UNIT PRICE INCLUDES, BUT IS NOT LIMITED TO, FINAL TRIMMING OF SUBGRADE OR SUBBASE, INTEGRAL CURB, BARS AND REINFORCEMENT, JOINTS AND SEALING, SURFACE CURING AND PAVEMENT PROTECTION, SAFETY FENCING, CONCRETE FOR RIGID HEADERS, BOXOUTS FOR FIXTURES. CONCRETE WILL BE C. MIX WITH A MINIMUM COMPRESSIVE STRENGTH OF 4,000 PSI AT 28 DAYS. NO EXTRA PAYMENT FOR COLD WEATHER PAVING.
12	7030-A-1	REMOVAL OF SIDEWALK
		FULL DEPTH SAW CUTS ALONG THE REMOVAL LIMITS ARE INCIDENTAL TO THIS ITEM. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADDITIONAL REMOVAL, EARTHWORK, SUBGRADE PREPARATION, MODIFIED SUBBASE AND PAVING EXPENSES DUE TO DAMAGED EDGES. ADDITIONAL REMOVAL TO BE DETERMINED BY ENGINEER. PAYMENT SHALL BE MADE FOR THE AREA OF PAVEMENT REMOVED REGARDLESS OF THICKNESS.
13	7030-E	SIDEWALK, PCC, 4 INCH
		UNIT PRICE INCLUDES, BUT IS NOT LIMITED TO, FINAL TRIMMING OF SUBGRADE OR SUBBASE, BARS AND REINFORCEMENT, JOINTS AND SEALING, SURFACE CURING AND PAVEMENT PROTECTION, SAFETY FENCING, CONCRETE FOR RIGID HEADERS, BOXOUTS FOR FIXTURES, . CONCRETE WILL BE C OR M MIX WITH A MINIMUM COMPRESSIVE STRENGTH OF 4,000 PSI AT 28 DAYS. COMPACTION OF SUBGRADE IS INCIDENTAL TO THIS ITEM. NO EXTRA PAYMENT FOR COLD WEATHER PAVING.
14	7040-H	PAVEMENT REMOVAL
		ALL REMOVALS TO BE MARKED AND MEASURED BY THE ENGINEER. FULL DEPTH SAW CUTS ALONG THE REMOVAL LIMITS ARE INCIDENTAL TO THIS ITEM. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADDITIONAL REMOVAL, EARTHWORK, SUBGRADE PREPARATION, MODIFIED SUBBASE AND PAVING EXPENSES DUE TO DAMAGED EDGES. ADDITIONAL REMOVAL TO BE DETERMINED BY ENGINEER. PAYMENT SHALL BE MADE FOR THE AREA OF PAVEMENT REMOVED REGARDLESS OF THICKNESS.
15	8020-B	PAINTED PAVEMENT MARKINGS, SOLVENT/WATERBORNE
		UNIT PRICE INCLUDES, BUT IS NOT LIMITED TO, REFLECTORIZING SPHERES, LAYOUT, SURFACE PREPARATION, AND APPLICATION OF MARKING PAINT.
16	8020-G	PAINTED SYMBOLS AND LEGENDS, DURABLE
		UNIT PRICE INCLUDES, BUT IS NOT LIMITED TO, LAYOUT, SURFACE PREPARATION, AND APPLICATION OF EACH SYMBOL AND LEGEND.
17	8030-A	TEMPORARY TRAFFIC CONTROL
		LUMP SUM PRICE INCLUDES, BUT IS NOT LIMITED TO, INSTALLATION, MAINTENANCE, AND REMOVAL OF TEMPORARY TRAFFIC CONTROL; TOTAL ROADWAY CLOSURES WITH INSTALLATION AND REMOVAL OF DETOUR SIGNING AS SHOWN IN THE CONTRACT DOCUMENTS; REMOVAL AND REINSTALLATION OR COVERING OF PERMANENT TRAFFIC CONTROL DEVICES THAT CONFLICT WITH THE TEMPORARY TRAFFIC CONTROL PLAN; MONITORING AND DOCUMENTING TRAFFIC CONTROL CONDITIONS; AND FLAGGERS. WHEN REQUIRED IN THE CONTRACT DOCUMENTS
18	8040-B	TRAFFIC SIGNS
		UNIT PRICE INCLUDES, BUT IS NOT LIMITED TO, THE SIGN BLANK, APPLICATION OF REFLECTIVE SHEETING, APPLICATION OF SCREENED MESSAGE, ALL MOUNTING HARDWARE, THE POST, AND ERECTING THE SIGN ACCORDING TO THE MUTCD AND AS REQUIRED TO PROVED THE SIGN COMPLETE INSTALLED.
19	9010-B	HYDRAULIC SEEDING, SEEDING, FERTILIZING, AND MULCHING, TYPE 1 - PERMANENT LAWN
		SEED ALL AREAS DISTURBED BY CONSTRUCTION AS INDICATED ON PLANS. THE COST FOR WATERING UNTIL SEED ESTABLISHMENT IS ACCEPTED SHALL BE CONSIDERED INCIDENTAL TO THIS ITEM. ROCK PICKING, FINISH GRADING, SEED BED PREP AND RESEEDING ARE CONSIDERED INCIDENTAL TO THIS ITEM. SEED AND FERTILIZER SHALL BE APPLIED PRIOR TO MULCHING. THE CONTRACTOR IS RESPONSIBLE FOR MOWING AND MAINTAINING SEEDED AREAS UNTIL THE PROJECT IS ACCEPTED BY THE OWNER. SEEDING OF AREAS DISTURBED OUTSIDE OF THE CONSTRUCTION LIMITS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AT NO ADDITIONAL COST TO OWNER. THE SEEDING RATE SHALL BE AT LEAST 260 LBS/ACRE. APPLY A 6-24-24, NITROGEN, PHOSPHATE, POTASH, COMMERCIAL FERTILIZER OR EQUIVALENT AT THE RATE OF 300 LBS PER ACRE. APPLY MULCHING PER MANUFACTERS RECOMMENDATIONS.
20	9040-F-1	WATTLE, STRAW, 9 INCH
		UNIT PRICE INCLUDES, BUT IS NOT LIMITED TO, ANCHORING STAKES AND REMOVAL OF WATTLES.
21	9040-Q-2	EROSION CONTROL MULCHING, HYDRO MULCHING, WOOD CELLULOSE
	-	TO BE USED ONLY AS DIRECTED BY ENGINEER FOR TEMPORARY EROSION CONTROL.
22	9040-T-1	INLET PROTECTION DEVICE, DROP-IN
		UNIT PRICE INCLUDES, BUT IS NOT LIMITED TO, REMOVAL AND OFF-SITE DISPOSAL OF ACCUMULATED SEDIMENT.
23	9080-A	CONCRETE STEPS
24	0000 5	UNIT PRICE INCLUDES, BUT IS NOT LIMITED TO, REINFORCEMENT, EXPANSION JOINT MATERIAL, AND PREPARATION OF SUBGRADE.
24	9080-В	HANDRAIL, POWDER COATED
	40	COLOR TO BE BLACK OR AS APPROVED BY OWNER.
25	10010-A	DEMOLITION WORK
		BID ITEM PAYED FOR REMOVAL OF EXISTING STEPS IN FRONT OF M-2 BUILDING. REMANDER OF BUILDING IS TO BE PROTECTED.
26	11010-A	CONSTRUCTION SURVEY  LUMP SUM PRICE INCLUDES, BUT IS NOT LIMITED TO, THE COSTS OF RESETTING PROJECT CONTROL POINTS, RE-STAKING, AND ANY ADDITIONAL STAKING REQUESTED BEYOND THE REQUIREMENTS OF THIS SECTION.
27	11020 4	
27	11020-A	MOBILIZATION  THE UNIT PRICE FOR MOBILIZATION MAY INCLUDE THE FOLLOWING. A. THE MOVEMENT OF PERSONNEL, EQUIPMENT, AND SUPPLIES TO THE PROJECT SITE. B. THE ESTABLISHMENT OF OFFICES, BUILDINGS, AND OTHER FACILITIES NECESSARY FOR THE PROJECT. C. BONDING, PERMITS, OR OTHER EXPENSES INCURRED PRIOR TO CONSTRUCTION.
28	11050-A	CONCRETE WASHOUT
		LUMP SUM PRICE INCLUDES, BUT IS NOT LIMITED TO, PROVIDING CONCRETE WASHWATER CONTAINMENT, COLLECTION, AND DISPOSAL.

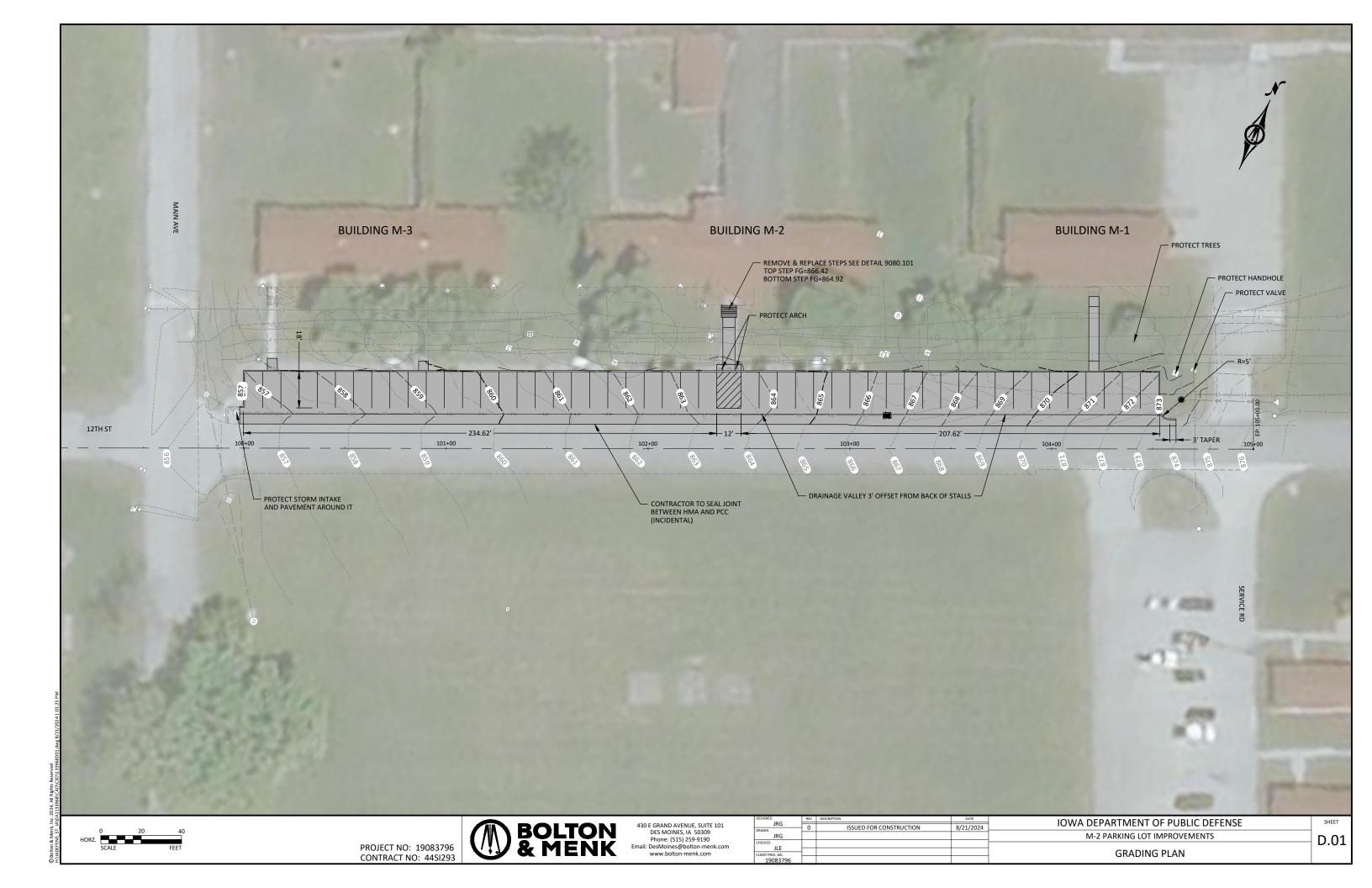
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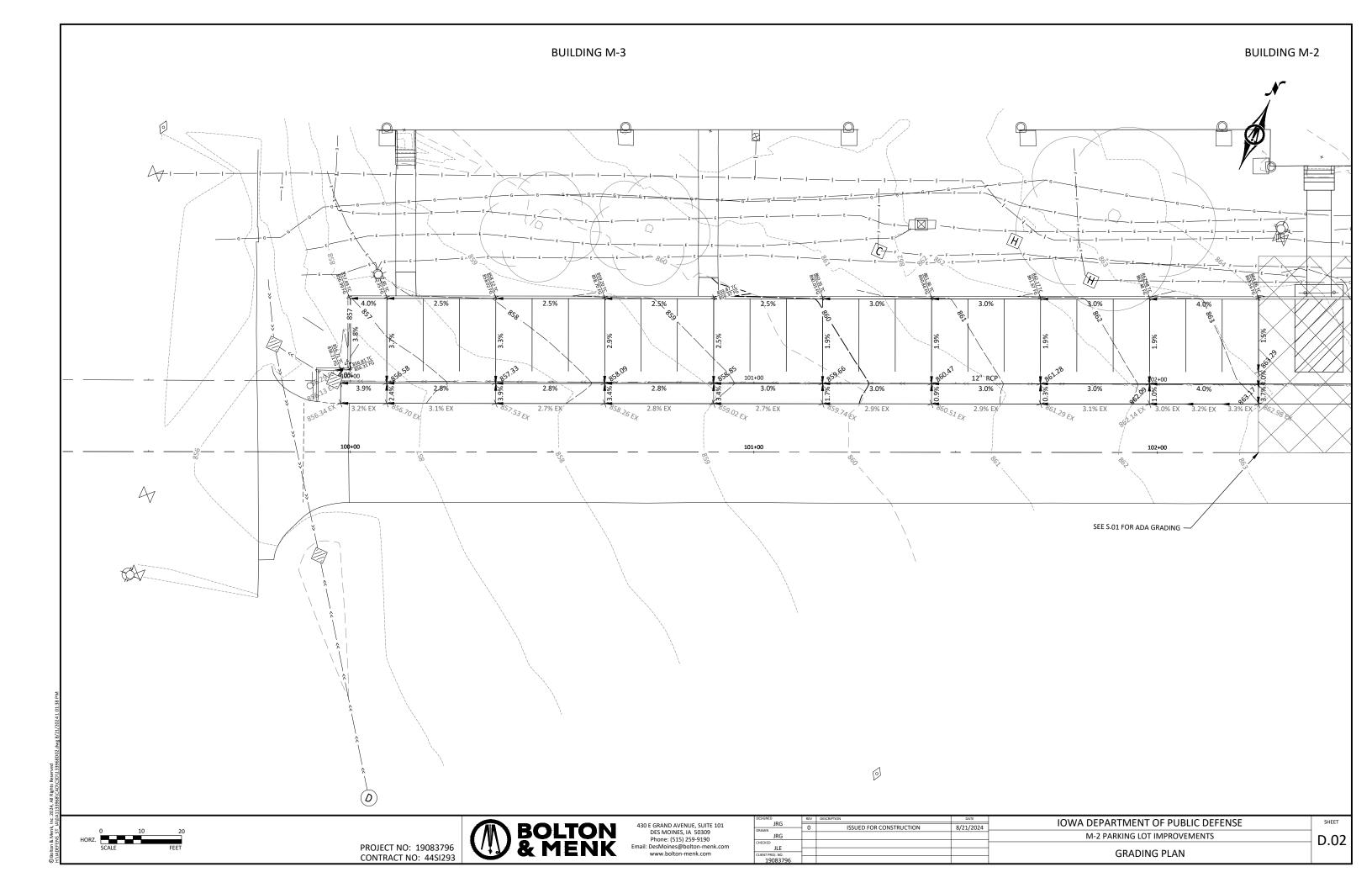
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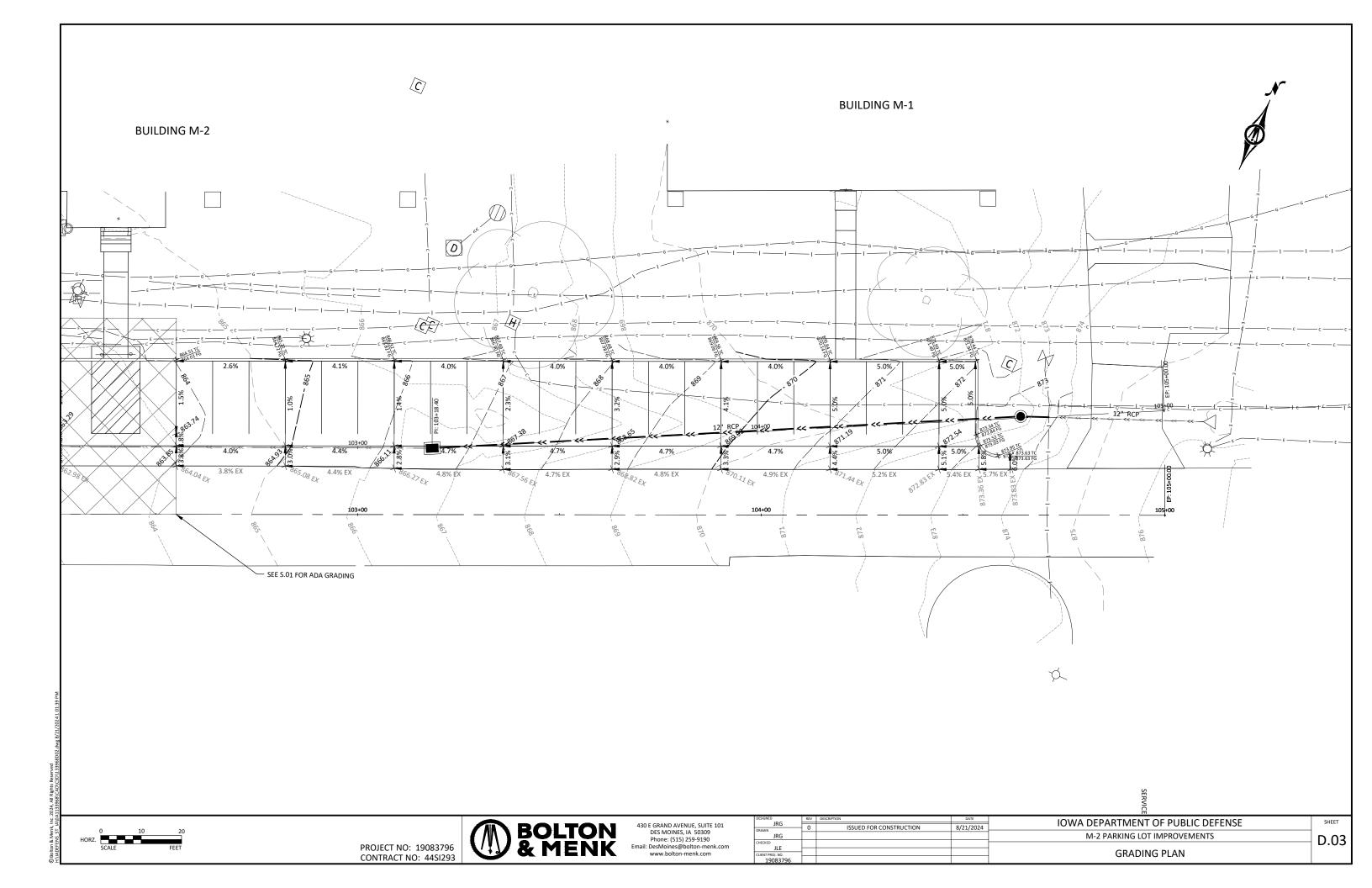


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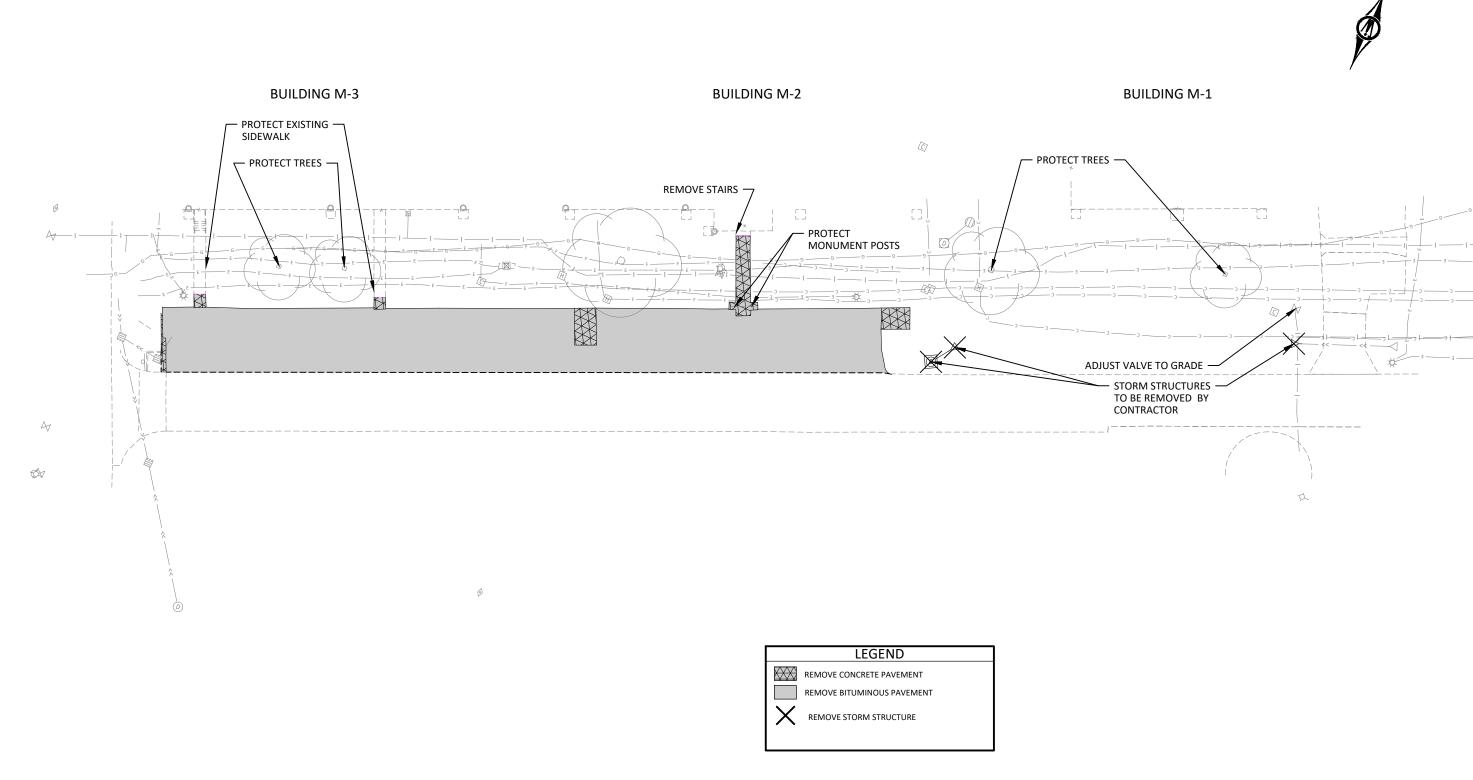
DESIGNED	REV	DESCRIPTION	DATE	IOWA DEPARTMENT OF PUBLIC DEFENSE	SHEET
JRG DRAWN	0	ISSUED FOR CONSTRUCTION	8/21/2024	IOWA DEPARTIVENT OF PUBLIC DEFENSE	SILELI
JRG				M-2 PARKING LOT IMPROVEMENTS	$C \cap 2$
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JLE CLIENT PROJ. NO.				QUANITIES & ESTIMATED REFERENCE NOTES	
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DESIGNED	REV	DESCRIPTION	DATE	IOWA DEPARTMENT OF PUBLIC DEFENSE	SHEET
JRG DRAWN	0	ISSUED FOR CONSTRUCTION	8/21/2024	IOWA DEPARTIVENT OF PUBLIC DEFENSE	511221
JRG				M-2 PARKING LOT IMPROVEMENTS	E 01
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JLE CLIENT PROJ. NO.				REMOVAL SHEETS	
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		ALIGNMENT LINE DATA					
L	INE#	LENGTH	BEARING	START POINT (E-N)	END POINT (E-N)		
	L1	600.00	N66° 02' 38"E	(1,581,059.13 - 621,638.67)	(1,581,607.45 - 621,882.29)		

POINT NORTHING/EASTING DATA										
POINT NUMBER	RAW DESCRIPTION	ELEVATION	NORTH	EAST						
70	VFBM /BURY BOLT SW SIDE	858.081	621,629.12	1,581,112.52						
71	VFBM /BURY BOLT NE SIDE	866.229	621,823.94	1,581,338.79						
130	VFCP / RBT MAG NAIL	856.038	621,733.84	1,581,075.50						
131	VFCP / RBT MAG NAIL	884.492	621,973.07	1,581,701.88						
132	VFCP / RBT MAG NAIL	866.327	621,462.57	1,581,670.72						
133	VFCP / RBT MAG NAIL	856.836	621,323.85	1,581,359.90						





DESIGNED	REV	DESCRIPTION	DATE	IOWA DEPARTMENT OF PUBLIC DEFENSE	SHEET
JRG DRAWN	0	ISSUED FOR CONSTRUCTION	8/21/2024	IOWA DEPARTIVIENT OF PUBLIC DEFENSE	511221
JRG				M-2 PARKING LOT IMPROVEMENTS	$C \cap 1$
CHECKED					— G.U1
CLIENT PROJ. NO.	-			ALIGNMENT AND CONTROL SHEETS	
19083796				ALIGNATION CONTROL STILL 13	

