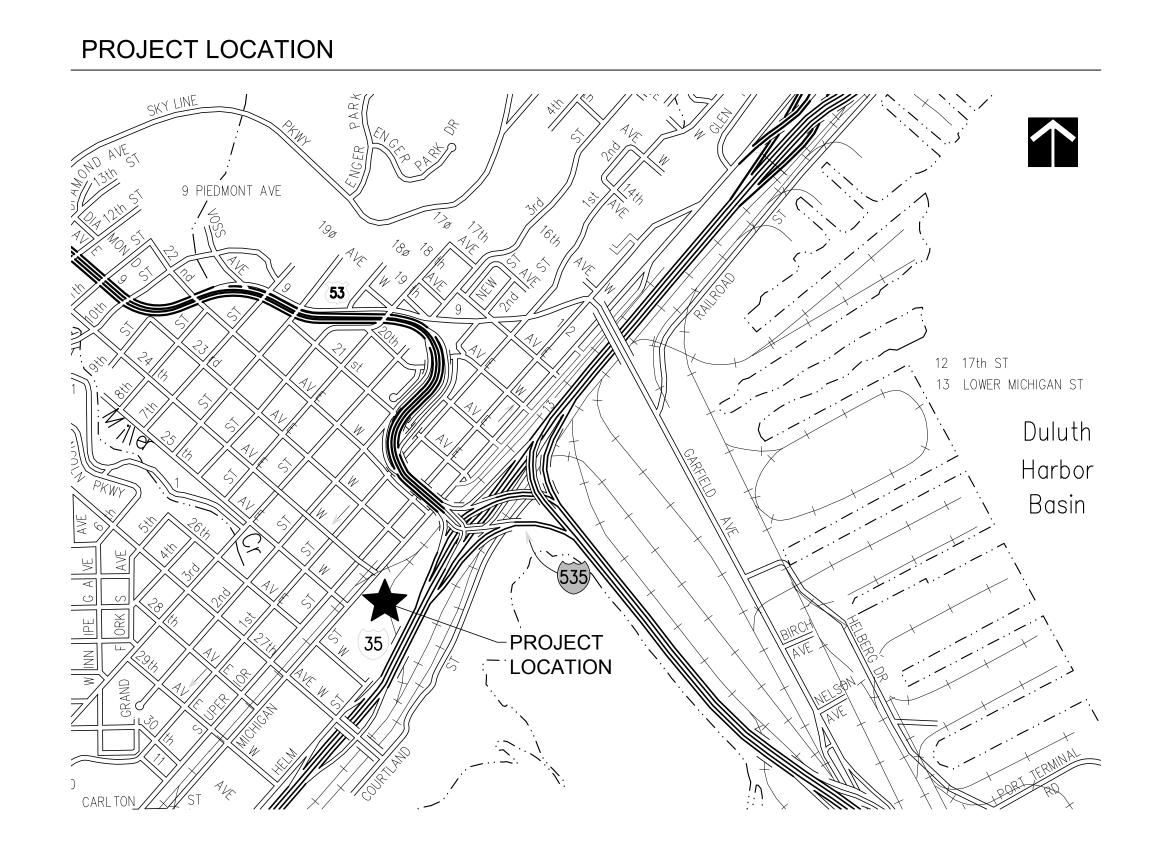
DULUTH TRANSIT AUTHORITY OPERATIONS CENTER SITE IMPROVEMENTS PROJECT

DULUTH, MN





CONTACTS

LANDSCAPE ARCHITECT
LHB, INC.
21 WEST SUPERIOR STREET, SUITE 500
DULUTH, MN 55802
CONTACT: MARK ANDERSON
E-MAIL: MARK.ANDERSON@LHBCORP.COM

PROJECT CIVIL ENGINEER
LHB, INC.
CONTACT: DAN SHAW

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E-MAIL: DAN.SHAW@LHBCORP.COM PHONE: (218) 279-2467

PROJECT STRUCTURAL ENGINEER

LHB, INC.
CONTACT: JENNIFER ALLEN
E-MAIL: JENNIFER.ALLEN@LHBCORP.COM
PHONE: (218) 279-2297

SHEET INDEX NOTES AND LEGEND EXISTING CONDITIONS (FOR INFORMATION ONLY) AREA "A" REMOVALS AND EROSION CONTROL PLAN AREA "B" REMOVALS AND EROSION CONTROL PLAN AREA "C" REMOVALS AND EROSION CONTROL PLAN AREA "A" GRADING PLAN C201 AREA "B" GRADING PLAN AREA "A" LAYOUT AND SURFACING PLAN AREA "B" LAYOUT AND SURFACING PLAN AREA "C" LAYOUT AND SURFACING PLAN AREA "A" LANDSCAPE PLAN AREA "B" LANDSCAPE PLAN AREA "C" LANDSCAPE PLAN CONSTRUCTION DETAILS CONSTRUCTION DETAILS CONSTRUCTION DETAILS LANDSCAPING DETAILS STRUCTURAL SHEETS
SD101 FOUNDATION DEMOLITION PLAN

FOUNDATION PLAN



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DULUTH TRANSIT
AUTHORITY (DTA)
2402 WEST MICHIGAN ST.

DULUTH, MINNESOTA 55806

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04/11/2023 BIDDING
O DATE ISSUED FOR

I HEREBY CERTIFY that this plan, specification or report was prepared by me or unde my direct supervision and that I am a dul Licensed Landscape Architect under th laws of the State of Minnesota

TYPED OR PRINTED NAME: MARK S. ANDERSON

DATE: <u>04/11/2023</u> REG. NO.: <u>12553</u>

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SIGNATURE: James 9.

TYPED OR PRINTED NAME: DANIEL G. SHAW

DATE: <u>04/11/2023</u> REG. NO.: <u>41423</u>

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DTA OPERATIONS CENTER
PARKING LOT

2402 WEST MICHIGAN ST. DULUTH, MINNESOTA 55806

TITLE SHEET

DRAWN BY: JPH
CHECKED BY: MSA
PROJ. NO: 190728
DRAWING NO:

G001

GENERAL NOTES

- 1. GOVERNING SPECIFICATION
 - a. THE STATE OF MINNESOTA DEPARTMENT OF TRANSPORTATION, STANDARD SPECIFICATIONS FOR CONSTRUCTION (MNDOT), 2020 EDITION SHALL APPLY ON ALL WORK, EXCEPT AS MODIFIED OR ALTERED IN THE FOLLOWING.
 - b. CITY OF DULUTH STANDARD CONSTRUCTION SPECIFICATIONS; 2019 EDITION.
 - c. ALL TRAFFIC CONTROL DEVICES AND SIGNING SHALL CONFORM TO THE 2022 MINNESOTA MUTCD, INCLUDING THE MOST CURRENT EDITION OF THE FIELD MANUAL. THE CONTRACTOR IS RESPONSIBLE FOR ALL TRAFFIC CONTROL ON THE PROJECT.
 - d. ALL REFERENCES TO MEASUREMENT AND PAYMENT IN THE GOVERNING SPECIFICATIONS SHALL NOT APPLY.
- 2. PROTECT FROM DAMAGE ALL EXISTING PAVEMENTS DESIGNATED TO REMAIN, INCLUDING IN THE PUBLIC R.O.W. ANY PAVEMENTS DAMAGED BY THE CONTRACTOR SHALL BE REPAIRED BY THE CONTRACTOR AT NO COST TO THE OWNER.
- 3. THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES SHOWN ARE APPROXIMATE ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES PRIOR TO COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL UNDERGROUND UTILITIES. UTILIZE THE ONE CALL EXCAVATION NOTICE SYSTEM OF "MINNESOTA ONE-CALL" CALL 1-800-252-1166 AND PRIVATE UTILITIES ON PRIVATE PROPERTY.
- 4. GRADES SHOWN ARE FINISH SURFACE ELEVATIONS. THE CONTRACTOR SHALL MAKE APPROPRIATE DEDUCTIONS FOR VARYING SURFACES TO DETERMINE SUBGRADE ELEVATIONS.
- 5. ALL EXISTING AND PROPOSED STRUCTURE ACCESS COVERS SHALL BE ADJUSTED TO FINISHED GRADE BY THE CONTRACTOR.
- 6. THE CONTRACTOR SHALL OBTAIN A PERMIT FOR ALL WORK IN THE PUBLIC RIGHT OF WAY. INCLUDING STREET OCCUPANCY AND PARKING METER PERMITS. THE CONTRACTOR IS RESPONSIBLE FOR TRAFFIC CONTROL WHILE WORKING WITHIN THE RIGHT OF WAY. TRAFFIC CONTROL TO BE IN ACCORDANCE WITH MUTCD.
- 7. ALL WORK SHALL BE CONTAINED WITHIN DESIGNATED WORK LIMITS. NO DISTURBANCE SHALL BE PERMITTED OUTSIDE THE DESIGNATED LIMITS.

ACRONYMS & ABBREVIATIONS

POINT OF CENTER CURVE

ARCH.	ARCHITECTURAL	PLS.	PLACES
A.I.P.	ARCHITECTURAL ABANDON IN PLACE ABOVE GROUND APPROXIMATE BOTTOM OF CURB BELOW GROUND BITUMINOUS PIPE CROWN ELEVATION CITY OF DULUTH DUCTILE IRON PIPE EXISTING ELEVATION EACH WAY FORCE MAIN HIGH DENSITY POLYETHYLENE	PVC	POLYVINYL CHLORIDE
A.G.	ABOVE GROUND	PROP.	PROPOSED
APPROX.	APPROXIMATE	P.T.	POINT OF TANGENT
BC	BOTTOM OF CURB	RCP	REINFORCED CONCRETE PIPE
BG	BELOW GROUND	R.O.P.	RIGHT OF WAY
BIT.	BITUMINOUS	SCH.	SCHEDULE
CE	PIPE CROWN ELEVATION	S.0.G.	SLAB ON GRADE
C.O.D.	CITY OF DULUTH	SS	STAINLESS STEEL
DIP	DUCTILE IRON PIPE	STD.	STANDARD
EXIST.	EXISTING	TC	TOP OF CURB
ELEV.	ELEVATION	TEMP.	TEMPORARY
E.W.	EACH WAY	TYP.	TYPICAL
FM	FORCE MAIN	T/W	TOP OF WALL
HDPE	HIGH DENSITY POLYETHYLENE	V.I.F.	VERIFY IN FIELD
HMA	HOT MIX ASPHALT INVERT ELEVATION MAXIMUM MINIMUM MODIFIED	MNDOT	MINNESOTA DEPARTMENT OF
IE .	INVERT ELEVATION		TRANSPORTATION
MAX.	MAXIMUM	WWM	WELDED WIRE MESH
MIN.	MINIMUM	MUTCD	MANUAL ON UNIFORM
MOD.	MODIFIED		TRAFFIC CONTROL DEVICES
	MID POINT		
	ON CENTER		
P.C.	POINT OF CURVE		

EXISTING LEGEND

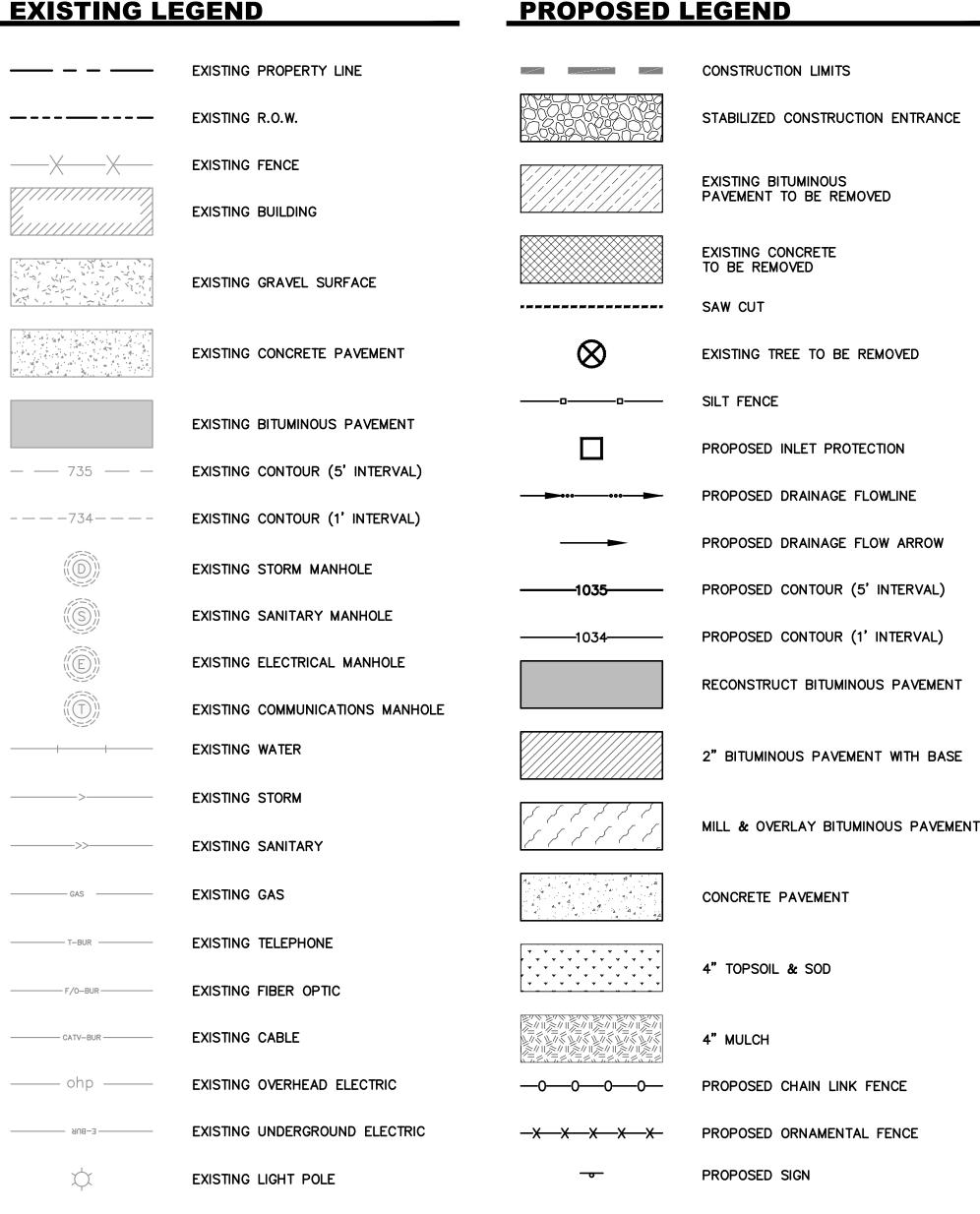
H.H.

EXISTING ELECTRIC HAND HOLE

EXISTING TREE LINE

EXISTING BOLLARD

EXISTING CONTROL POINT





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DULUTH TRANSIT AUTHORITY (DTA) 2402 WEST MICHIGAN ST. DULUTH, MINNESOTA 55806

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NO	DATE	ISSUED FOR	

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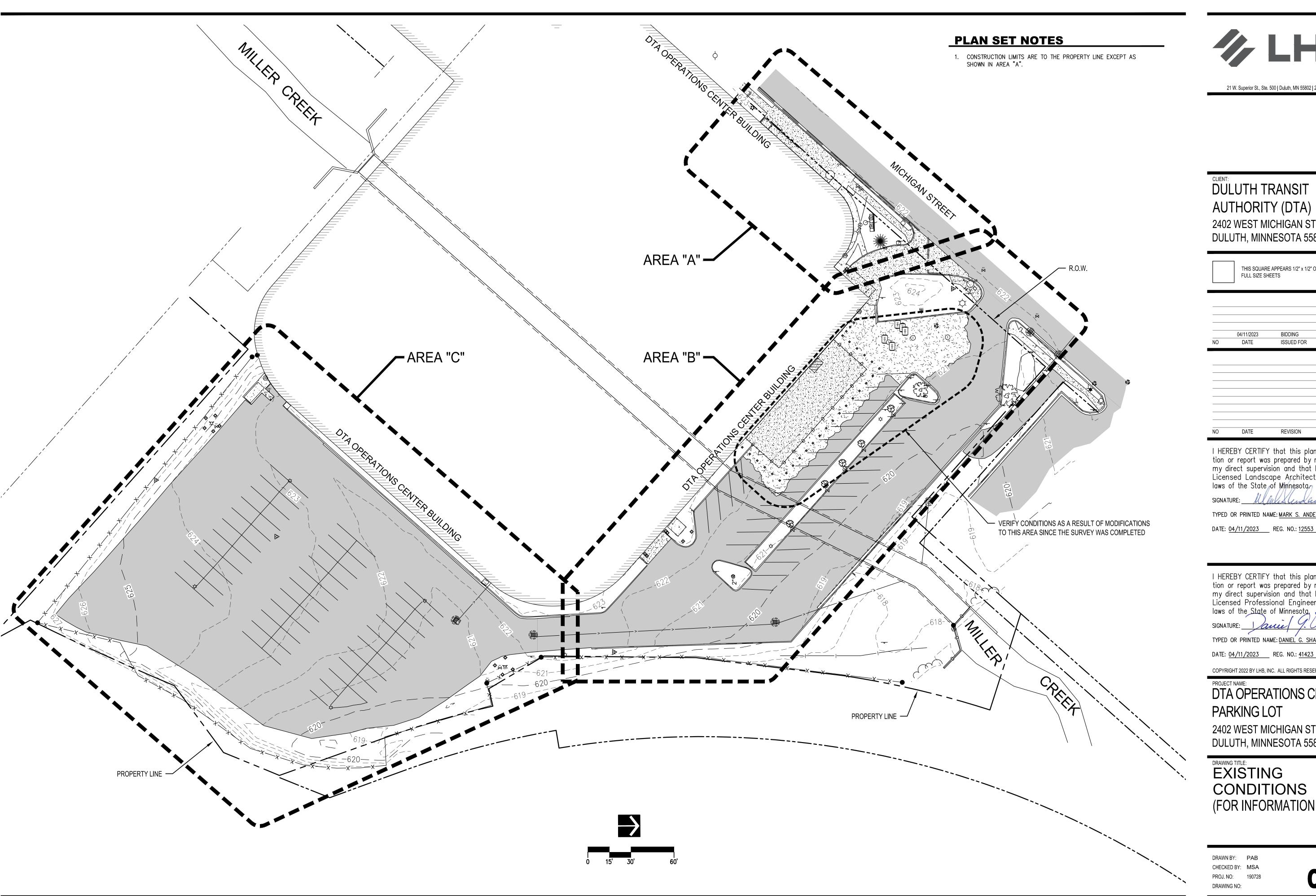
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DTA OPERATIONS CENTER PARKING LOT

2402 WEST MICHIGAN ST. DULUTH, MINNESOTA 55806

NOTES AND LEGEND

DRAWN BY: JPH CHECKED BY: MSA PROJ. NO: 190728 DRAWING NO:





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2402 WEST MICHIGAN ST. DULUTH, MINNESOTA 55806

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PROJECT NAME: DTA OPERATIONS CENTER PARKING LOT

2402 WEST MICHIGAN ST. DULUTH, MINNESOTA 55806

DRAWING TITLE:

EXISTING CONDITIONS (FOR INFORMATION ONLY)

DRAWN BY: PAB CHECKED BY: MSA PROJ. NO: 190728 DRAWING NO:

SHEET NOTES

1. CONTACT CITY OF DULUTH PRIOR TO WORK WITHIN THE R.O.W.

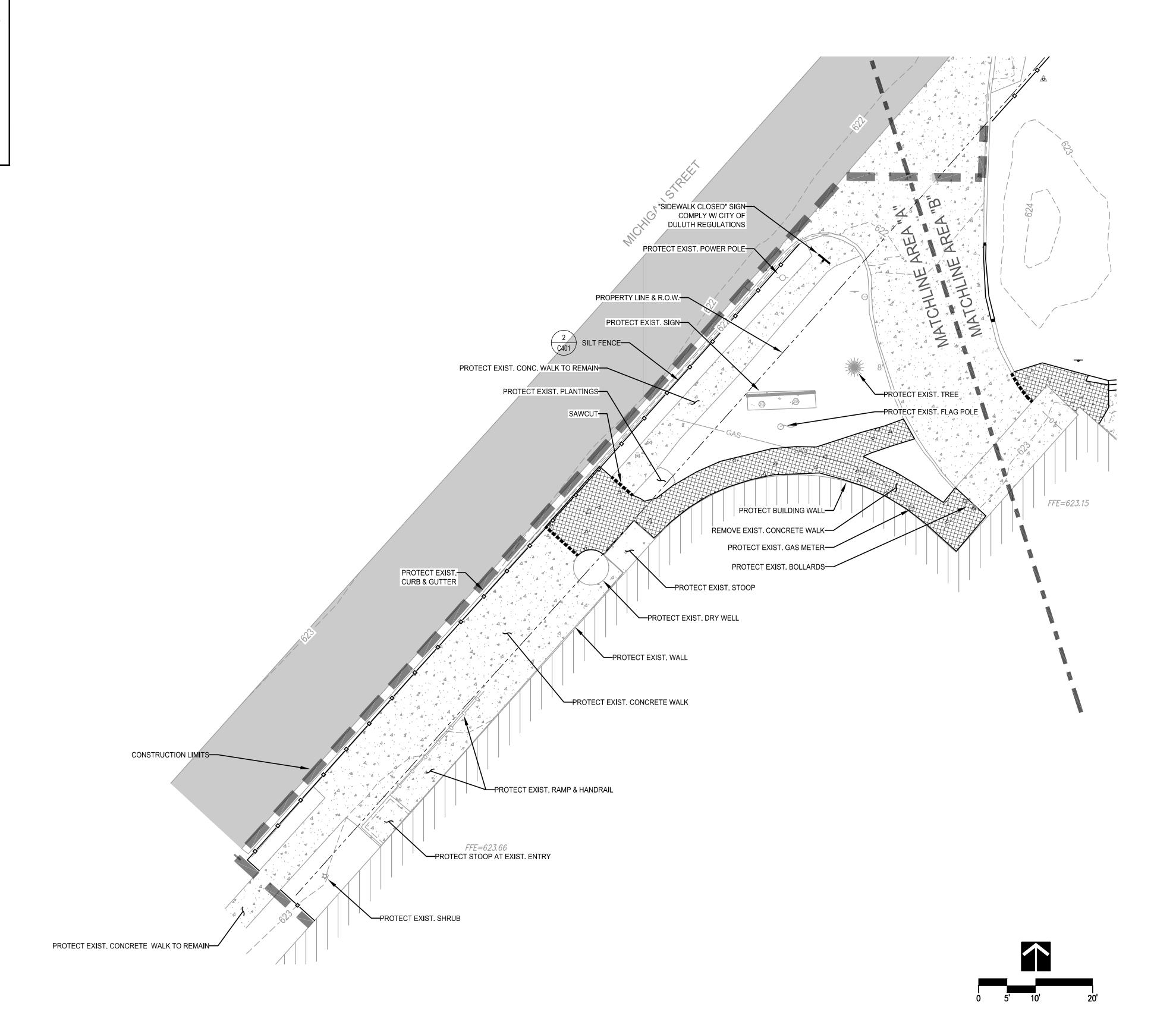


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WARNING

LOCATION OF ALL UNDERGROUND UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR. CALL BEFORE DIGGING

MINNESOTA ONE-CALL SYSTEM 1-800-252-1166 REQUIRED BY MN STATUTE 216D



DULUTH TRANSIT AUTHORITY (DTA) 2402 WEST MICHIGAN ST.

DULUTH, MINNESOTA 55806

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PROJECT NAME: DTA OPERATIONS CENTER PARKING LOT

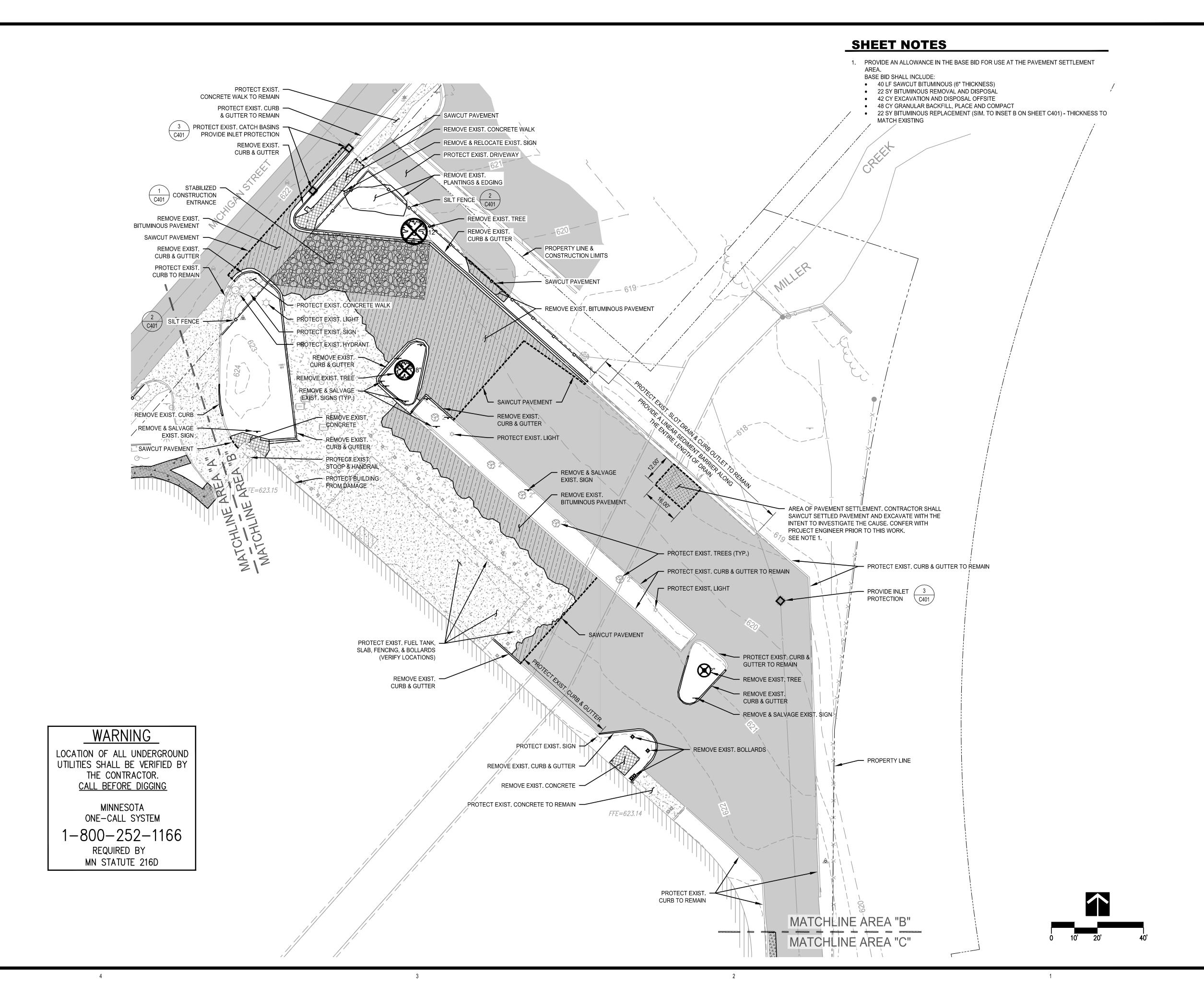
2402 WEST MICHIGAN ST. DULUTH, MINNESOTA 55806

DRAWING TITLE:

AREA "A" REMOVALS AND **EROSION CONTROL** PLAN

DRAWN BY: JPH CHECKED BY: MSA PROJ. NO: 190728

DRAWING NO:





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TYPED OR PRINTED NAME: DANIEL G. SHAW

DATE: <u>04/11/2023</u> REG. NO.: 41423

DATE: <u>04/11/2023</u> REG. NO.: <u>4142</u>

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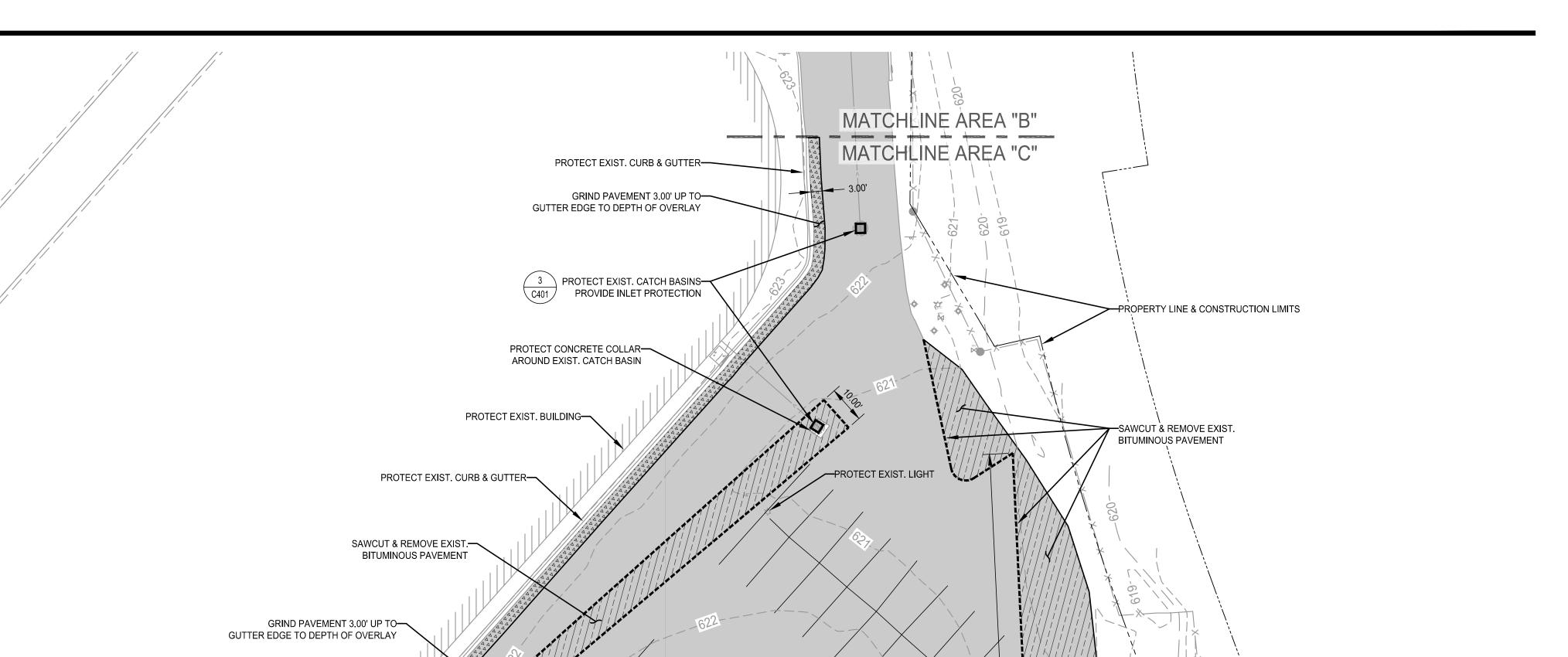
DTA OPERATIONS CENTER PARKING LOT

2402 WEST MICHIGAN ST. DULUTH, MINNESOTA 55806

AREA "B"
REMOVALS AND
EROSION CONTROL
PLAN

DRAWN BY: JPH
CHECKED BY: MSA
PROJ. NO: 190728

DRAWING NO:



PROTECT EXIST. LIGHT-

PROTECT EXIST. EQUIPMENT-

PROTECT EXIST. LIGHT-

PROTECT EXIST. LIGHT

WARNING

LOCATION OF ALL UNDERGROUND UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR.

CALL BEFORE DIGGING

MINNESOTA

ONE-CALL SYSTEM

1-800-252-1166

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2402 WEST MICHIGAN ST. DULUTH, MINNESOTA 55806

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DRAWING TITLE:

AREA "C" REMOVALS AND **EROSION CONTROL** PLAN

DRAWN BY: JPH CHECKED BY: MSA PROJ. NO: 190728 DRAWING NO:



WARNING

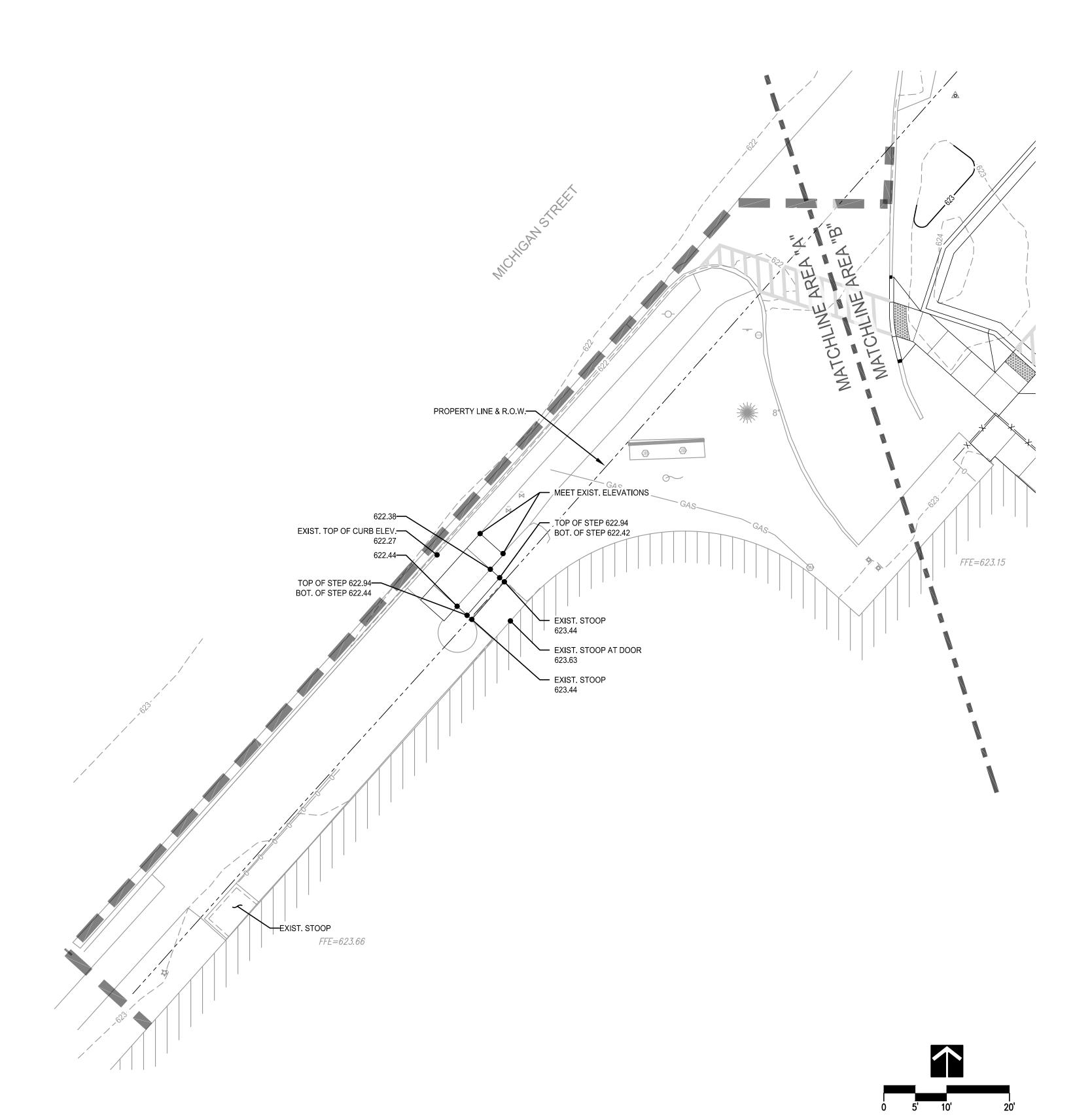
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SIGNATURE: Januel 9. Ohan

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DATE: <u>04/11/2023</u> REG. NO.: <u>41423</u>

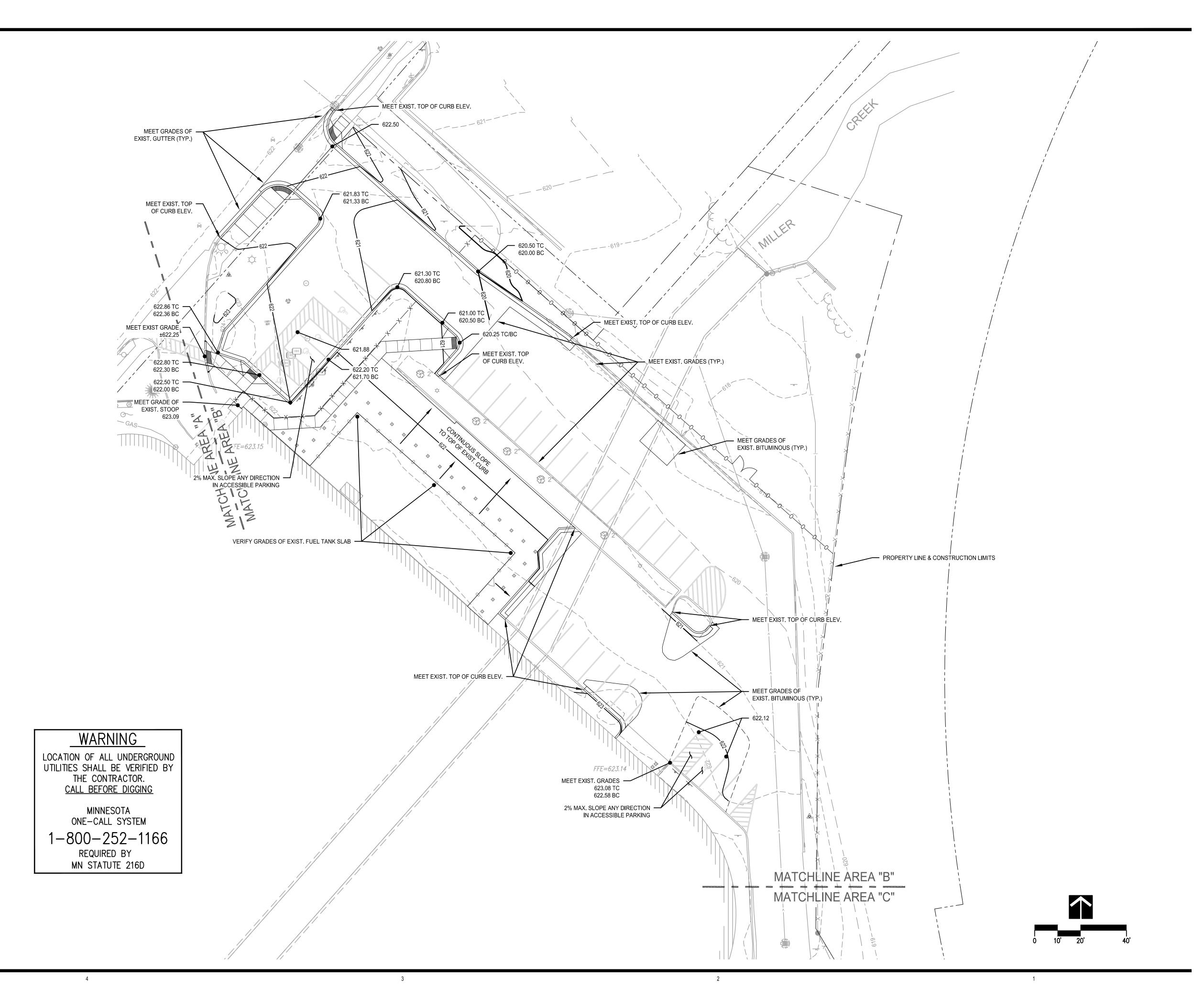
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2402 WEST MICHIGAN ST. DULUTH, MINNESOTA 55806

DRAWING TITLE:
AREA "A"
GRADING PLAN

DRAWN BY: JPH
CHECKED BY: MSA
PROJ. NO: 190728
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2402 WEST MICHIGAN ST. DULUTH, MINNESOTA 55806

DRAWING TITLE:

AREA "B" **GRADING PLAN**

CHECKED BY: MSA PROJ. NO: 190728 DRAWING NO:



WARNING

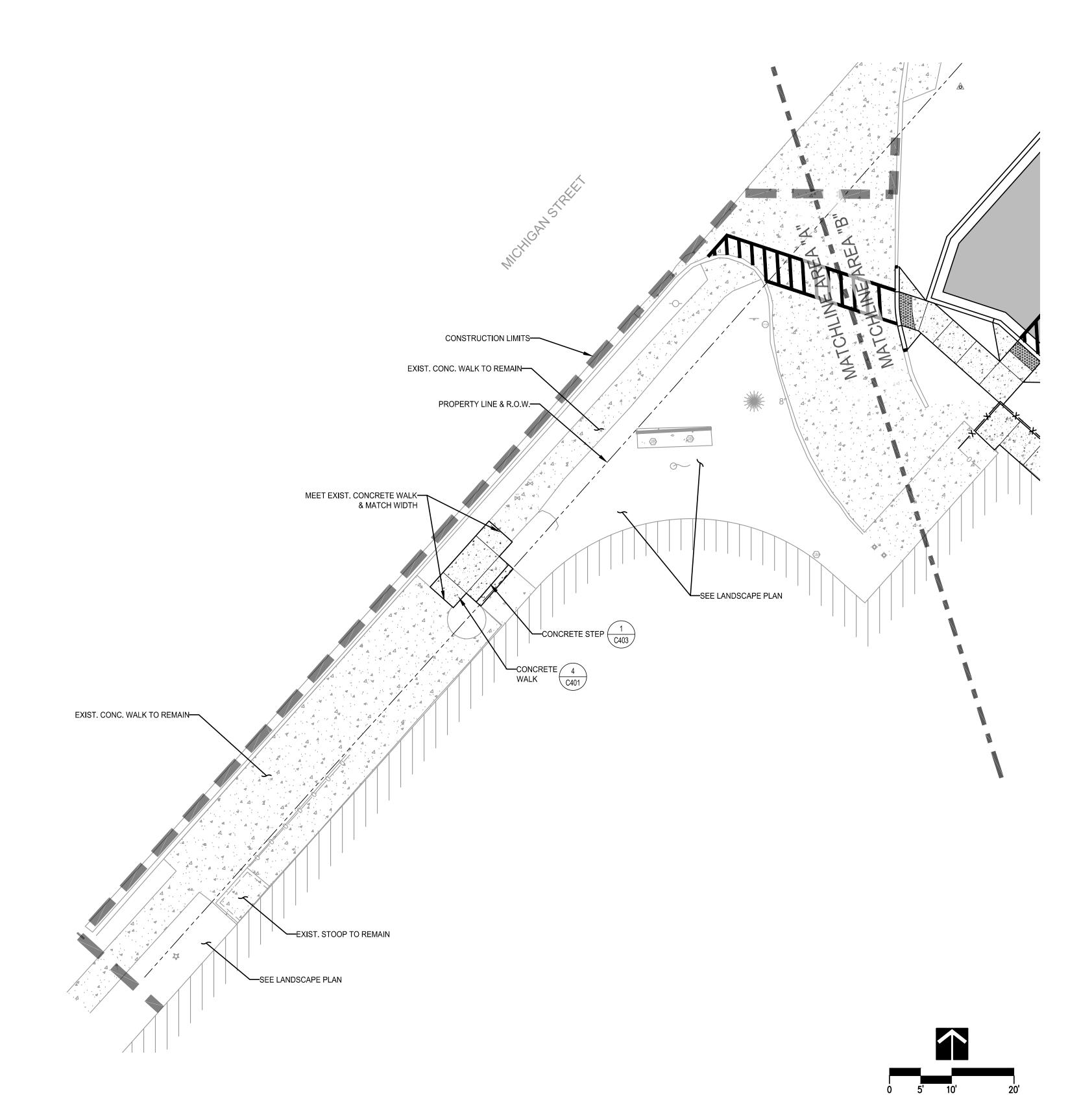
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ONE-CALL SYSTEM

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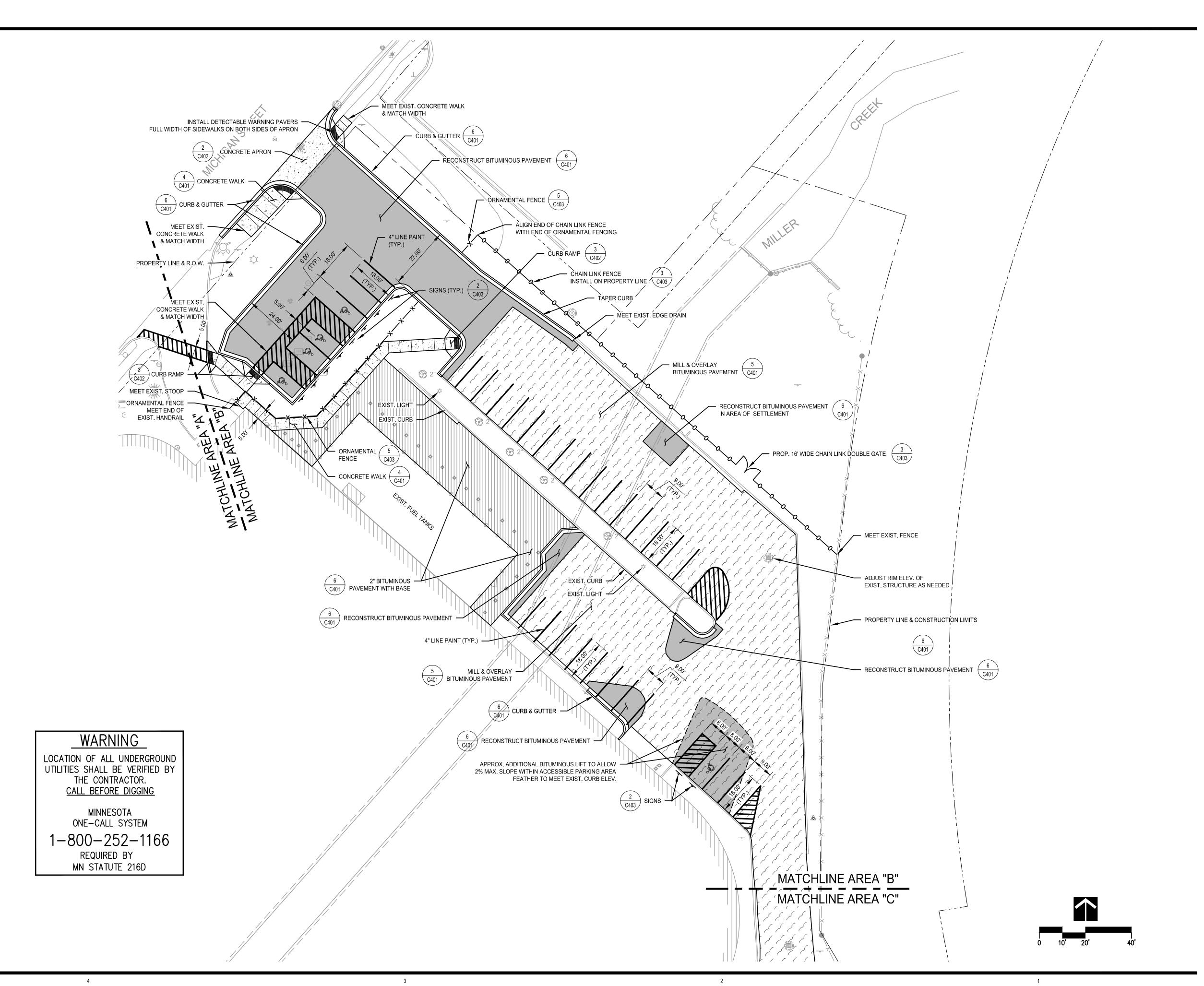
2402 WEST MICHIGAN ST. DULUTH, MINNESOTA 55806

AREA "A"
LAYOUT AND
SURFACING PLAN

DRAWN BY: JPH
CHECKED BY: MSA
PROJ. NO: 190728

DRAWING NO:

C30'





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2402 WEST MICHIGAN ST. DULUTH, MINNESOTA 55806

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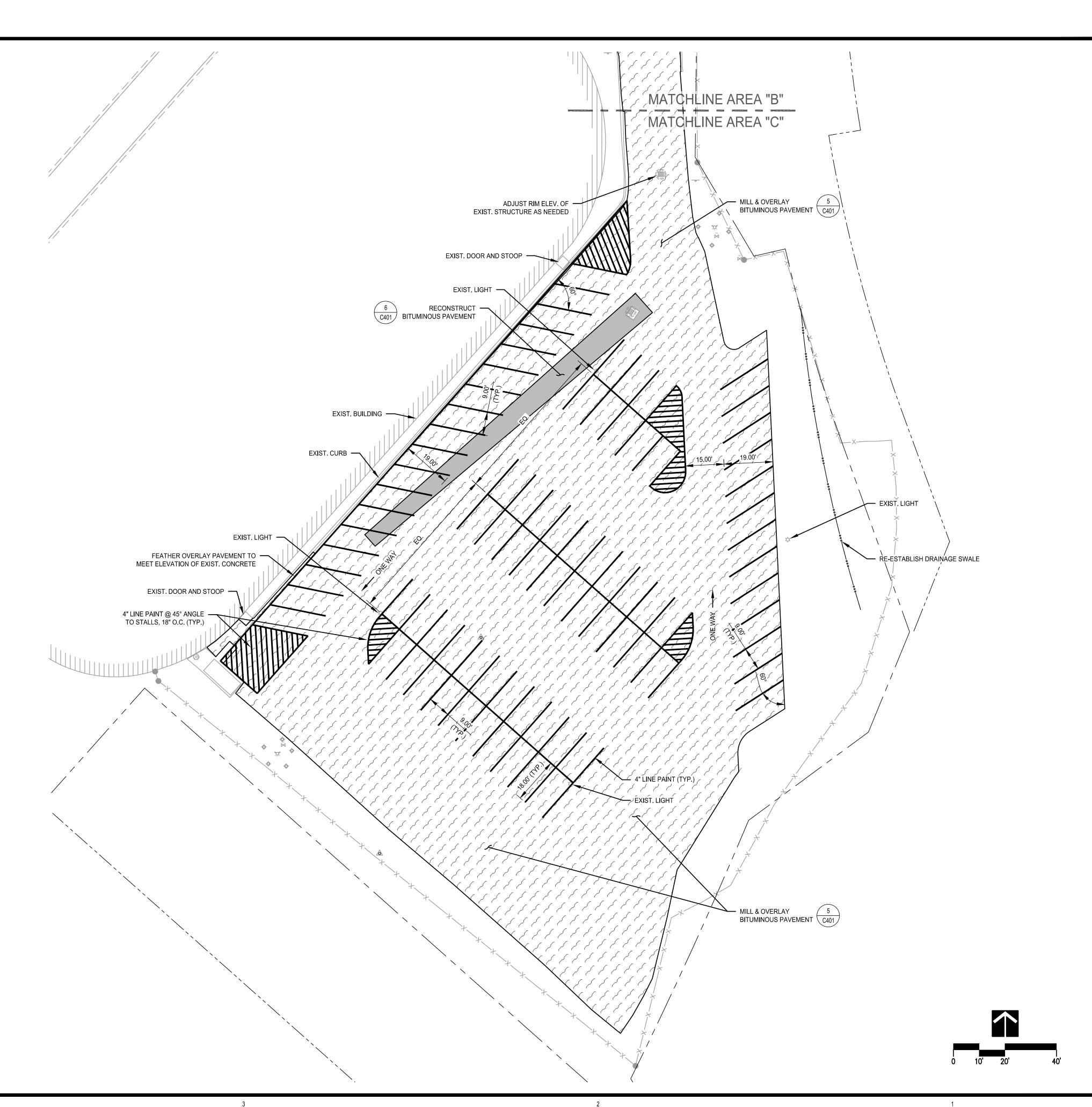
PROJECT NAME:

DTA OPERATIONS CENTER PARKING LOT

2402 WEST MICHIGAN ST. DULUTH, MINNESOTA 55806

AREA "B"
LAYOUT AND
SURFACING PLAN

DRAWN BY: JPH
CHECKED BY: MSA
PROJ. NO: 190728
DRAWING NO:



WARNING

LOCATION OF ALL UNDERGROUND UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR.

CALL BEFORE DIGGING

MINNESOTA

ONE-CALL SYSTEM

1-800-252-1166

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2402 WEST MICHIGAN ST. DULUTH, MINNESOTA 55806

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- Maria approximation

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SIGNATURE: 1 anie 9. haw

TYPED OR PRINTED NAME: DANIEL G. SHAW

DATE: 04/11/2023 REG. NO.: 41423

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PROJECT NAME:
DTA OPERATIONS CENTER
PARKING LOT

2402 WEST MICHIGAN ST. DULUTH, MINNESOTA 55806

AREA "C"
LAYOUT AND
SURFACING PLAN

DRAWN BY: JPH
CHECKED BY: MSA
PROJ. NO: 190728
DRAWING NO:



WARNING

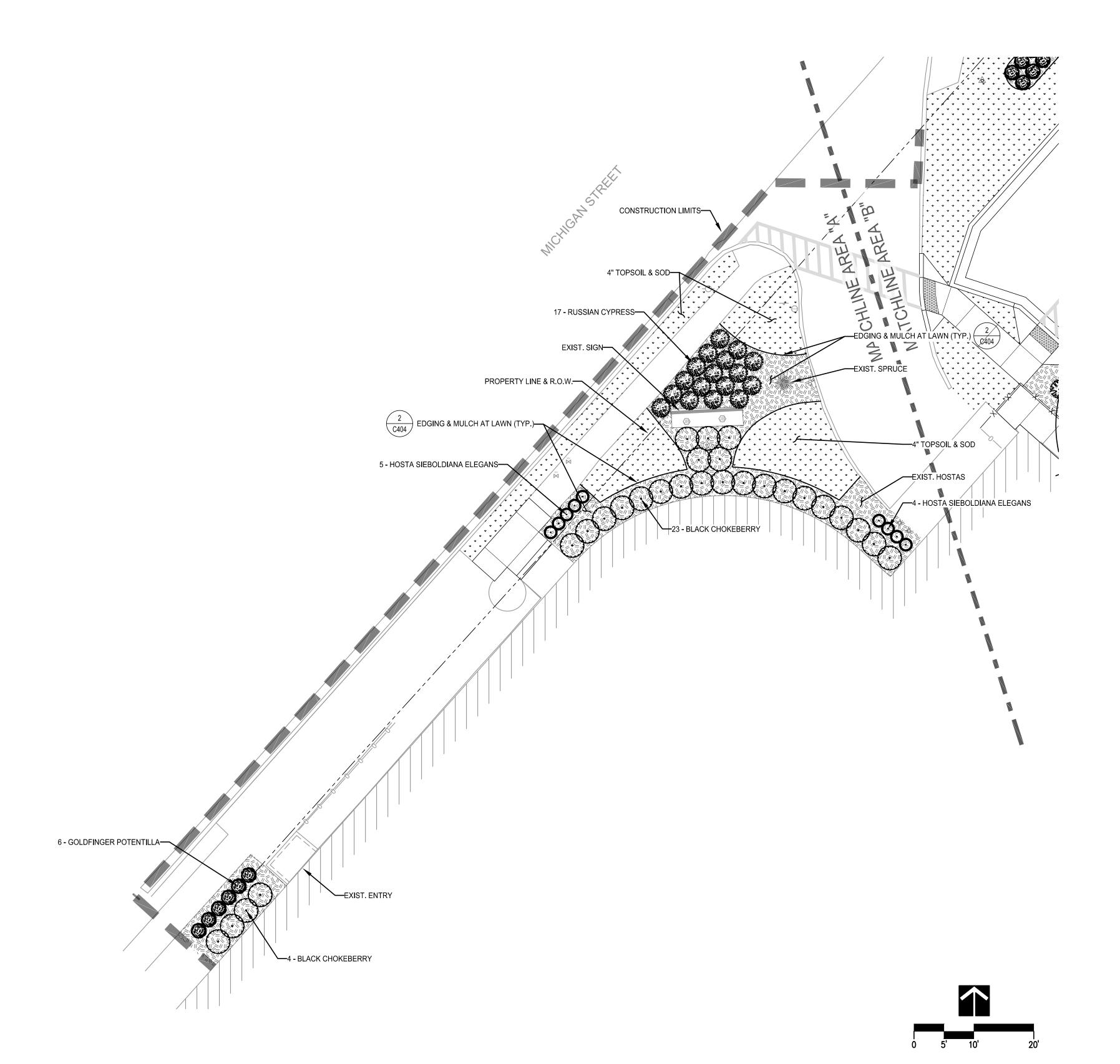
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,				
	NO	04/11/2023 DATE	BIDDING ISSUED FOR	
·				

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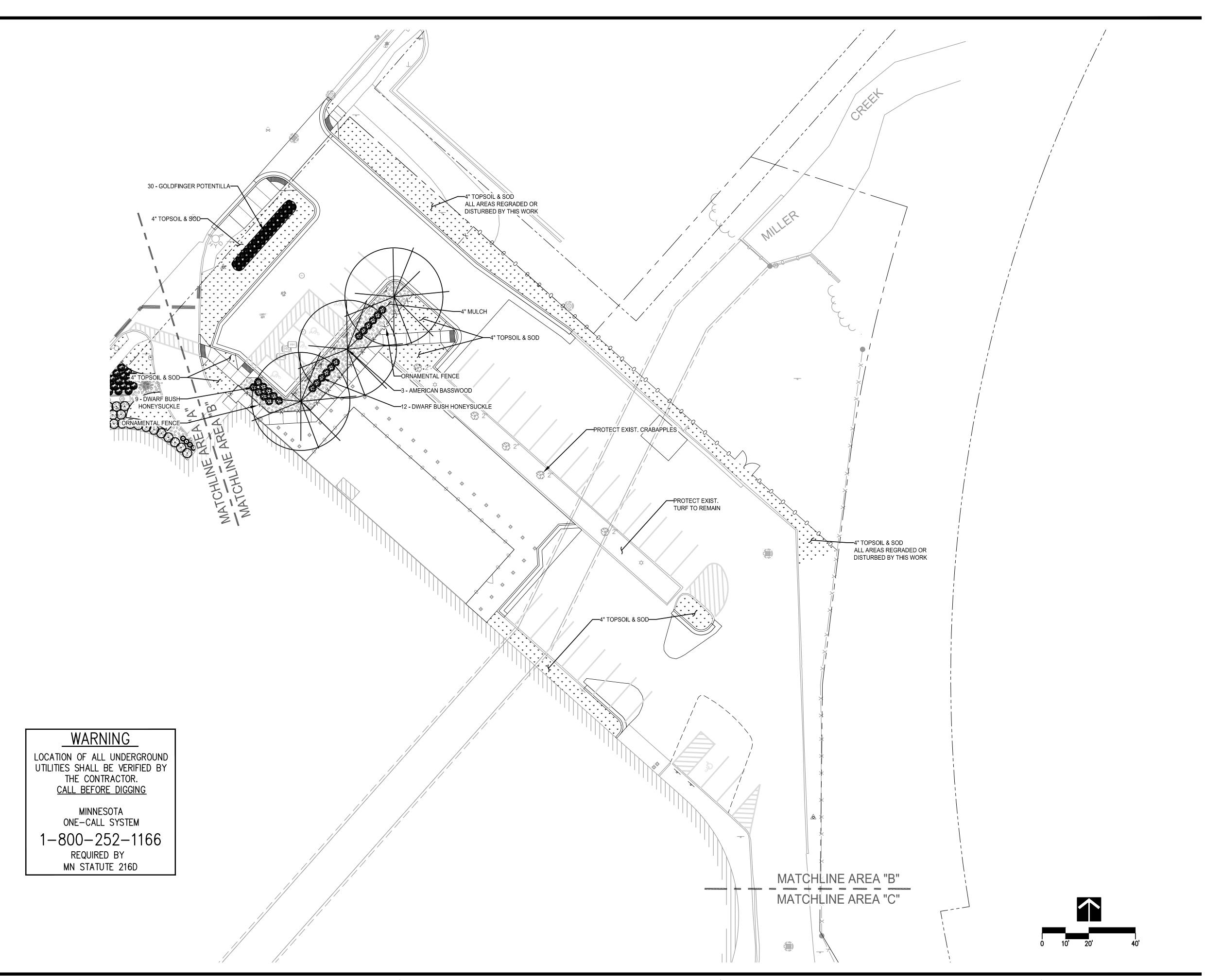
PROJECT NAME: DTA OPERATIONS CENTER PARKING LOT

2402 WEST MICHIGAN ST. DULUTH, MINNESOTA 55806

DRAWING TITLE:
AREA "A"
LANDSCAPE PLAN

DRAWN BY: JPH
CHECKED BY: MSA
PROJ. NO: 190728
DRAWING NO:

C31'





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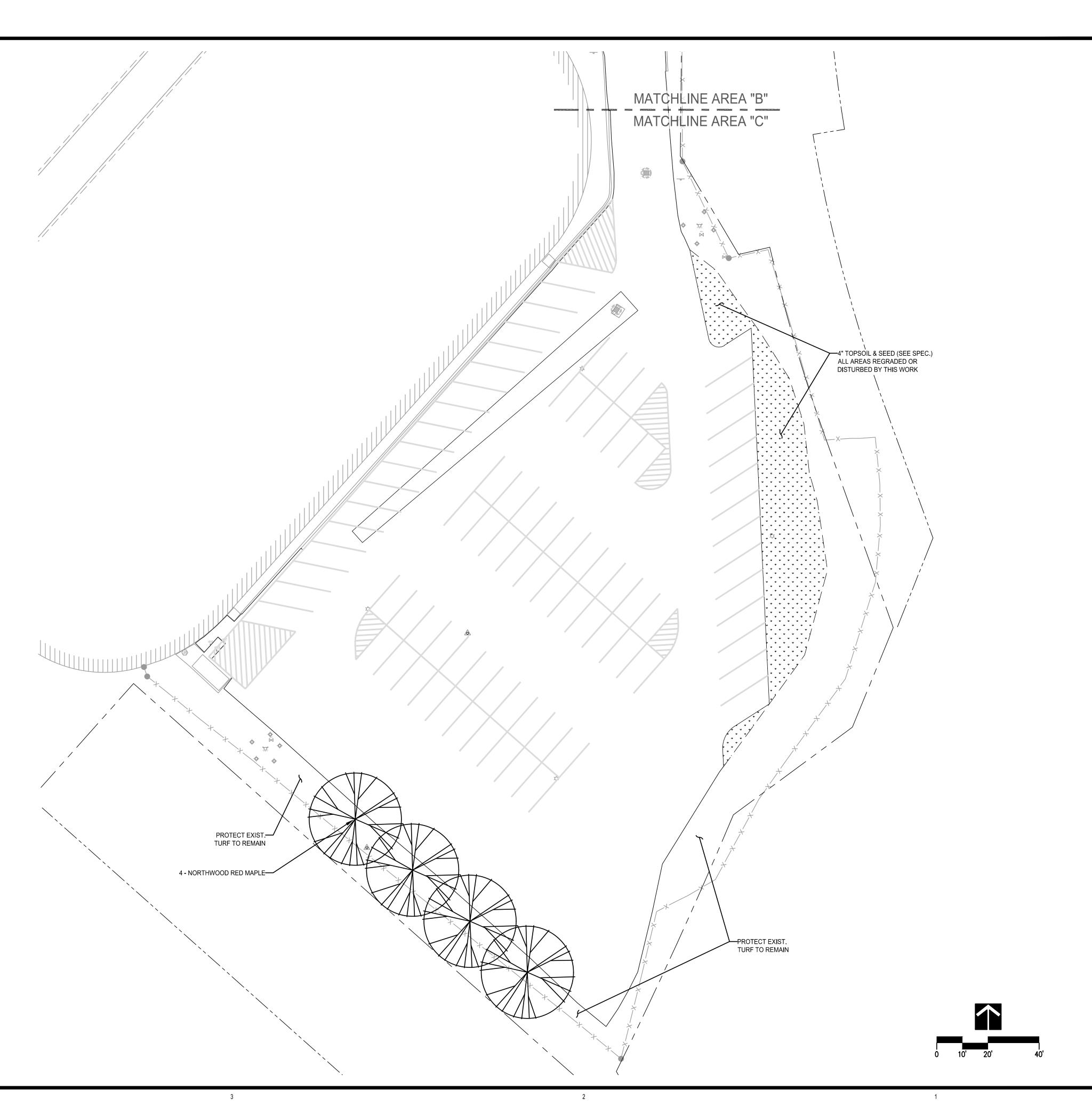
PROJECT NAME: DTA OPERATIONS CENTER PARKING LOT

2402 WEST MICHIGAN ST. DULUTH, MINNESOTA 55806

DRAWING TITLE:

AREA "B" LANDSCAPE PLAN

CHECKED BY: MSA PROJ. NO: 190728 DRAWING NO:



WARNING

LOCATION OF ALL UNDERGROUND UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR.

CALL BEFORE DIGGING

MINNESOTA ONE-CALL SYSTEM

1-800-252-1166

REQUIRED BY

MN STATUTE 216D



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DULUTH TRANSIT AUTHORITY (DTA)

2402 WEST MICHIGAN ST. DULUTH, MINNESOTA 55806

	THIS SQUARE FULL SIZE SHI	APPEARS 1/2" x 1/2" ON EETS
NO	04/11/2023 DATE	BIDDING ISSUED FOR
		REVISION

I HEREBY CERTIFY that this plan, specifica— tion or report was prepared by me or under my direct supervision and that I am a duly Licensed Landscape Architect under the laws of the State of Minnesota.

TYPED OR PRINTED NAME: MARK S. ANDERSON

DATE: <u>04/11/2023</u> REG. NO.: <u>12553</u>

I HEREBY CERTIFY that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota. SIGNATURE: Janie 4. haw

TYPED OR PRINTED NAME: DANIEL G. SHAW

DATE: <u>04/11/2023</u> REG. NO.: <u>41423</u>

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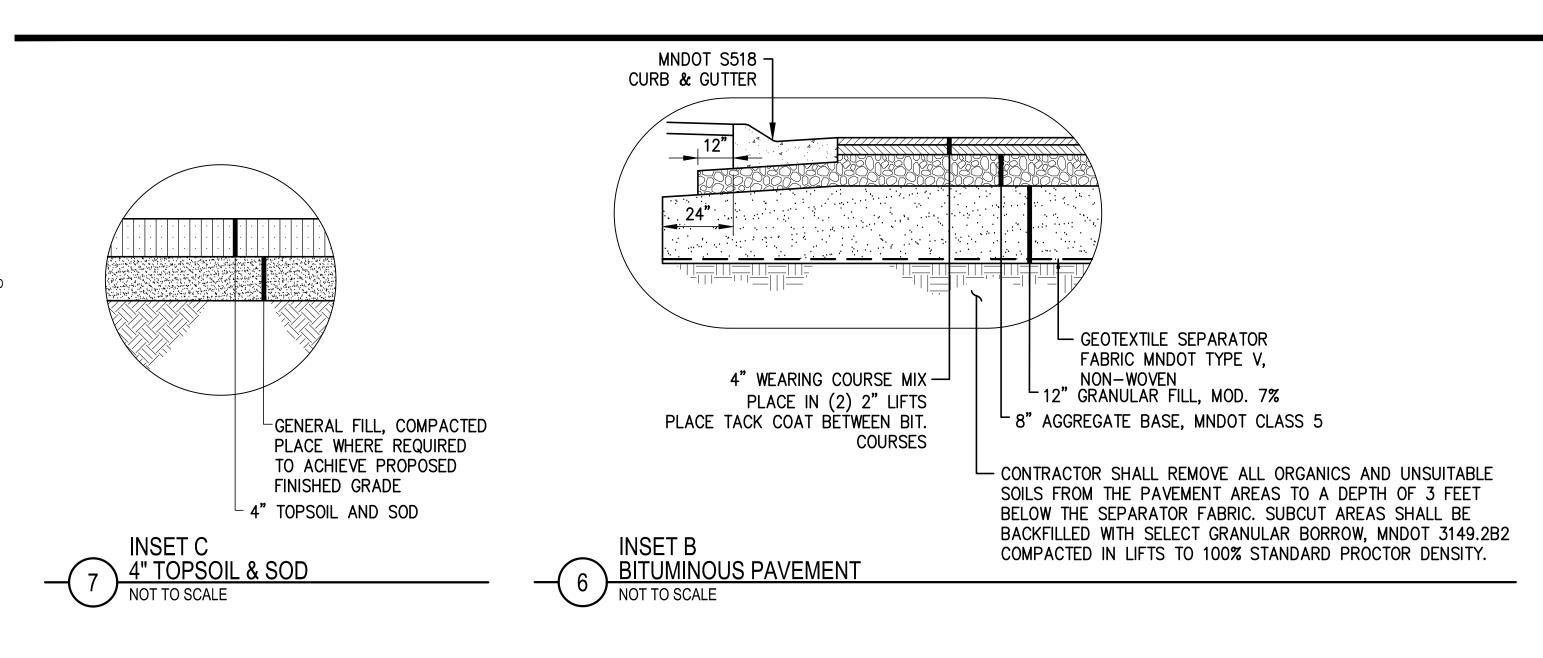
PROJECT NAME: DTA OPERATIONS CENTER PARKING LOT

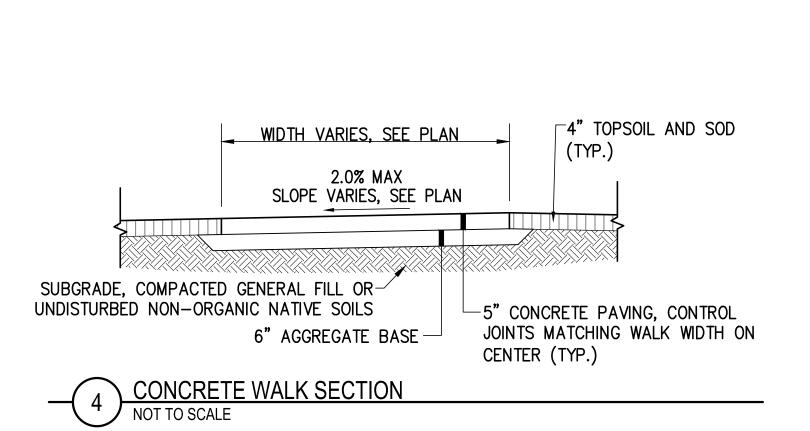
2402 WEST MICHIGAN ST. DULUTH, MINNESOTA 55806

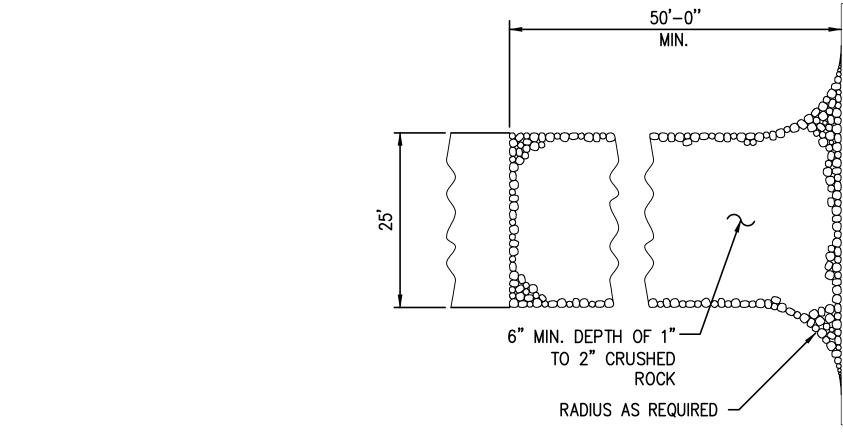
DRAWING TITLE:
AREA "C" LANDSCAPE PLAN

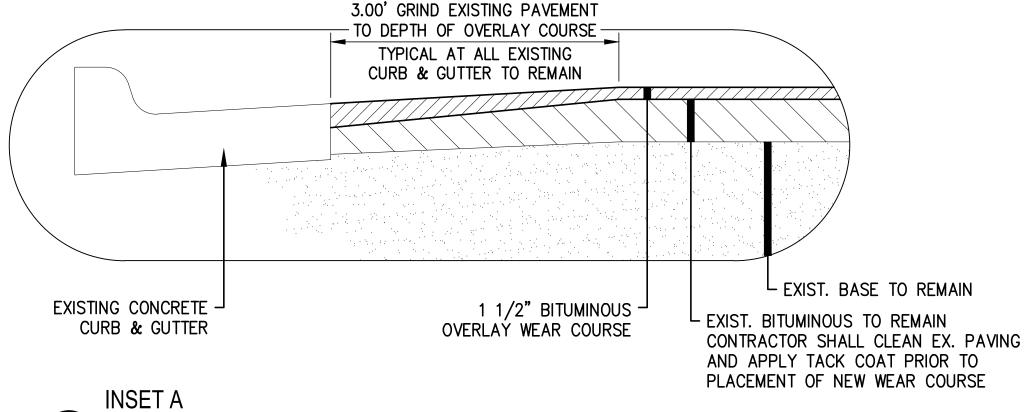
CHECKED BY: MSA PROJ. NO: 190728

DRAWING NO:







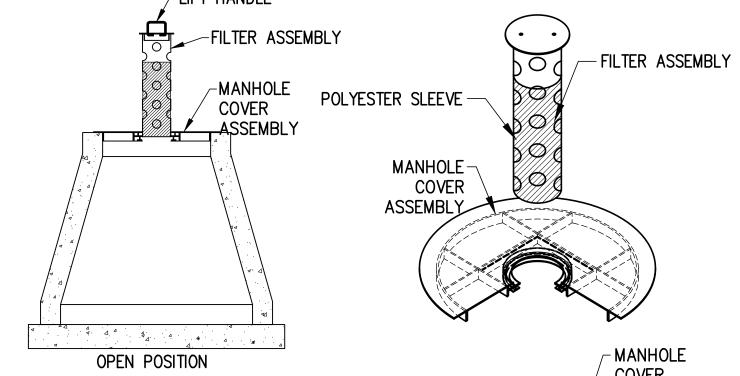


OVERLAY BITUMINOUS PAVEMENT

NOT TO SCALE

LIFT HANDLE

FILTER ASSEMBLY

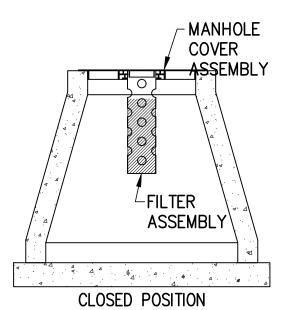


NOTES:

1. WIMCO ROAD DRAIN RD-27 SHOWN. FILTER
ASSEMBLY MAY BE IN CLOSED POSITION DURING
HOURS OF CONSTRUCTION OPERATIONS. FILTER
SHALL BE IN THE OPEN POSITION DURING "OFF"

HOURS TO ALLOW STORM WATER TO ENTER

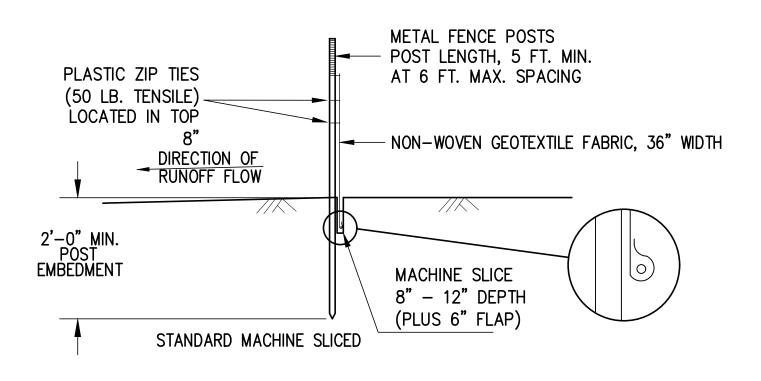
2. **BERYLOGEBURSH**ALL BE USED TO PREVENT SEDIMENT FROM ENTERING CATCH BASINS. DEVICES SHALL BE LEFT IN PLACE UNTIL CASTINGS ARE INSTALLED.



3 INLET PROTECTION - TYPE I

CONSTRUCTION ENTRANCE SPECIFICATIONS

- * STONE SIZE: USE 1"-2" CRUSHED ROCK OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
- * THICKNESS: NOT LESS THAN 6-INCHES.
- * FILTER CLOTH: SHALL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.
- * MAINTENANCE: THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHT-OF-WAYS MUST BE REMOVED IMMEDIATELY.
- * WASHING: WHEELS SHALL BE CLEANED TO REMOVE
 SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC
 RIGHT—OF—WAY. WHEN WASHING IS REQUIRED, IT SHALL BE
 DONE ON AN AREA STABILIZED WITH STONE AND WHICH
 DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
- * PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN EVENT.





1 STABILIZED CONSTRUCTION ENTRANCE
NOT TO SCALE



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DULUTH TRANSIT AUTHORITY (DTA)

2402 WEST MICHIGAN ST.
DULUTH, MINNESOTA 55806

04/11/2023 BIDDING NO DATE ISSUED FOR		THIS SQUARE FULL SIZE SHI	: APPEARS 1/2" x 1/2" ON EETS
		_	
NO DATE ISSUED FOR		04/11/2023	BIDDING
NO DATE ISSUEDTION	NO	DATE	ISSUED FOR

I HEREBY CERTIFY that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Landscape Architect under the laws of the State of Minnesota

SIGNATURE: _____

TYPED OR PRINTED NAME: MARK S. ANDERSON

DATE: <u>04/11/2023</u> REG. NO.: <u>12553</u>

I HEREBY CERTIFY that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.

SIGNATURE: Janie J. han

TYPED OR PRINTED NAME: DANIEL G. SHAW

DATE: 04/11/2023 REG. NO.: 41423

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PROJECT NAME:

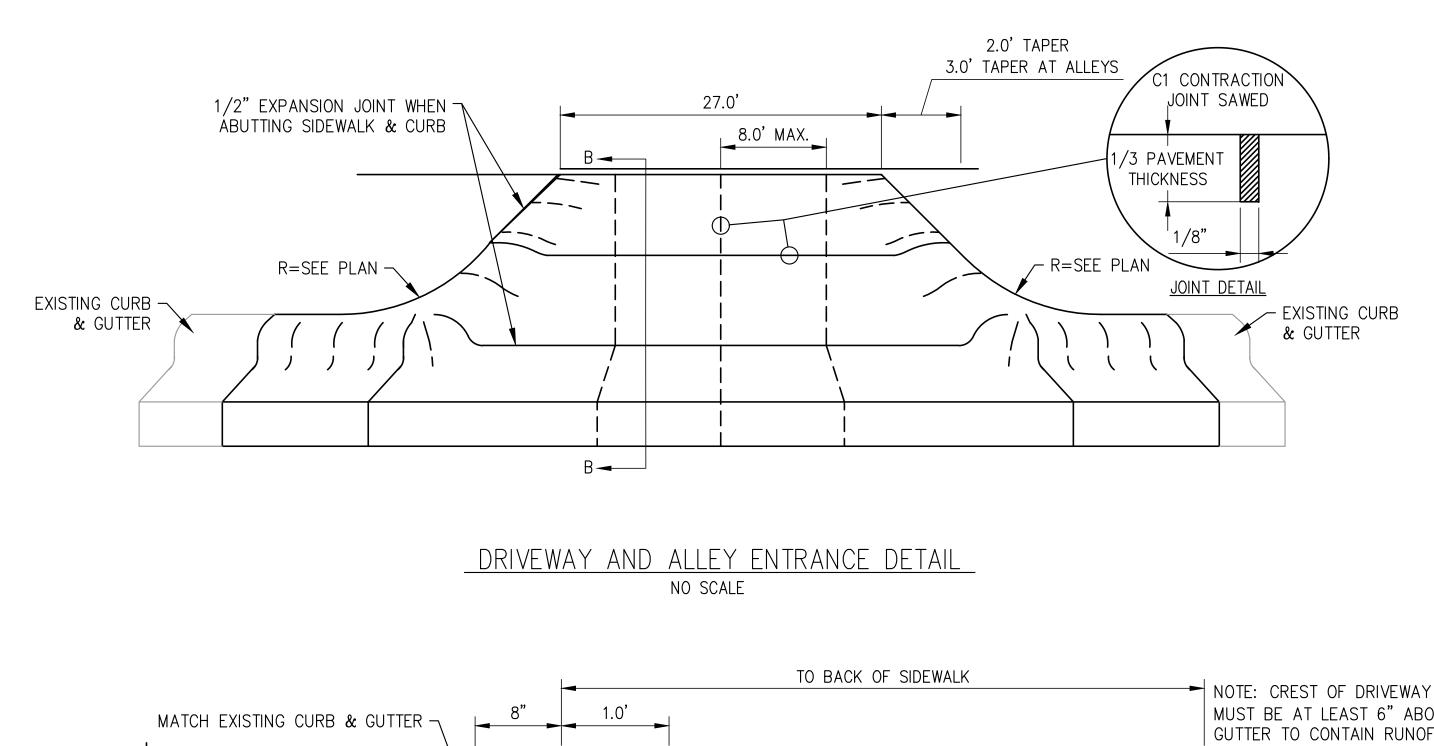
DTA OPERATIONS CENTER

PARKING LOT 2402 WEST MICHIGAN ST. DULUTH, MINNESOTA 55806

AWING TITLE:

CONSTRUCTION DETAILS

DRAWN BY: JPH
CHECKED BY: MSA
PROJ. NO: 190728
DRAWING NO:



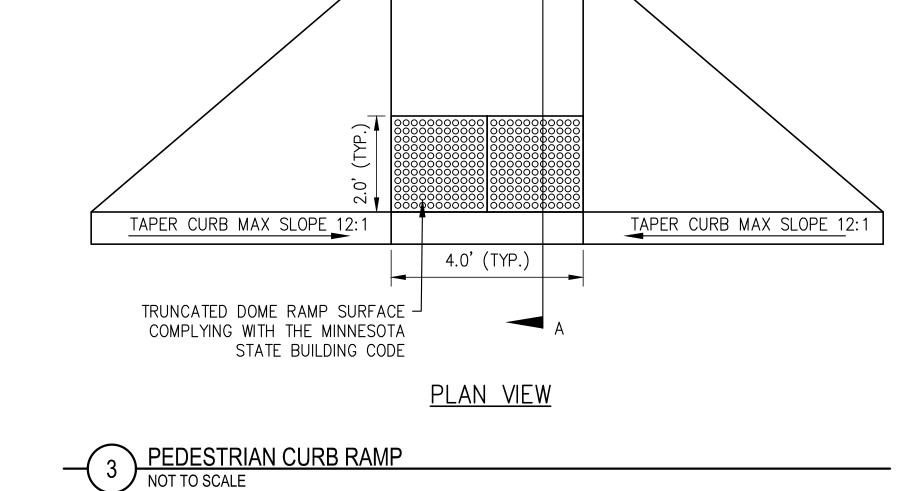
MATCH EXISTING CURB & GUTTER 8" 1.0' MUST BE AT LEAST 6" ABOVE GUTTER TO CONTAIN RUNOFF.

8" 1.0' MUST BE AT LEAST 6" ABOVE GUTTER TO CONTAIN RUNOFF.

8" 8" 8" AGGREGATE BASE CLASS 5 UNDER DRIVEWAY PAVEMENT

SECTION B—B

NO SCALE



CURB RETURNS

2:1 MAXIMUM_

STATE BUILDING CODE

- TRUNCATED DOME RAMP SURFACE COMPLYING WITH THE MINNESOTA

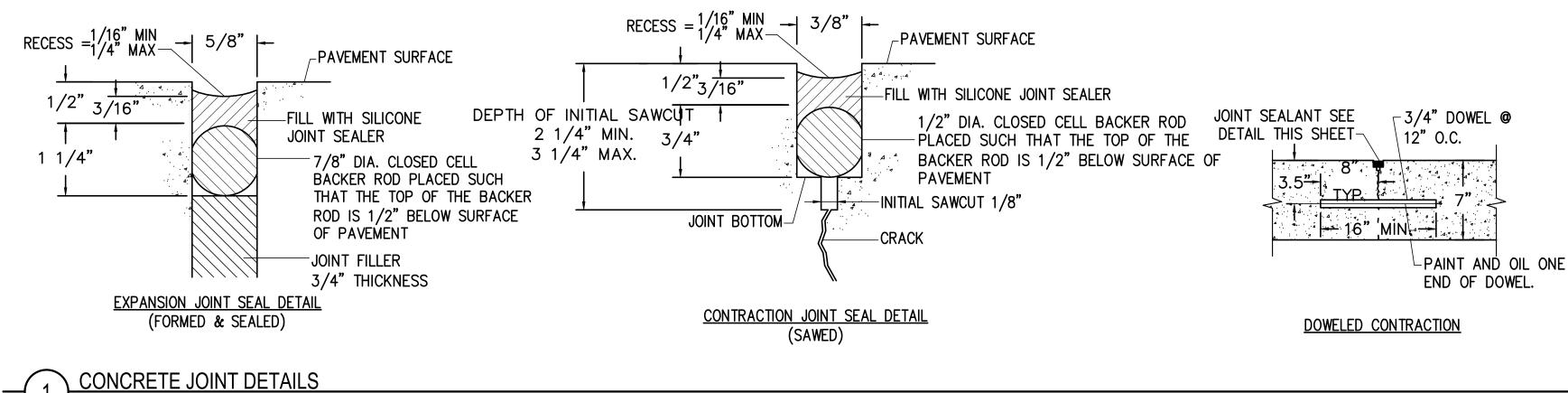
SECTION A-A

CURB & GUTTER

4.0' MIN.

CONCRETE WALK





// LHE

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DULUTH TRANSIT
AUTHORITY (DTA)

2402 WEST MICHIGAN ST. DULUTH, MINNESOTA 55806

		THIS SQUARE APF FULL SIZE SHEETS	EARS 1/2" x 1/2" ON
		W11/2023	BIDDING
NC)	DATE	ISSUED FOR
- - - -			
NO)	DATE	REVISION

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PROJECT NAME:
DTA OPERATIONS CENTER
PARKING LOT

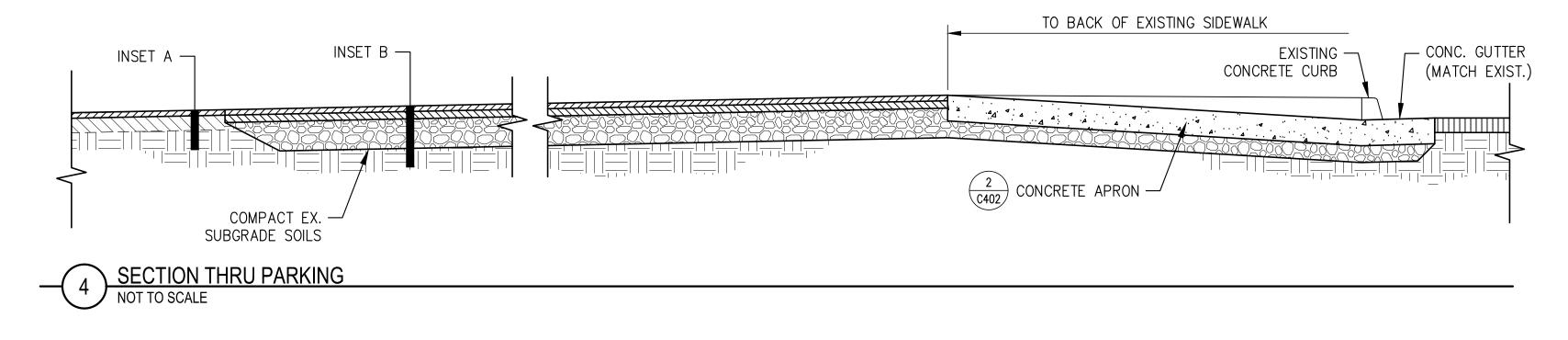
2402 WEST MICHIGAN ST. DULUTH, MINNESOTA 55806

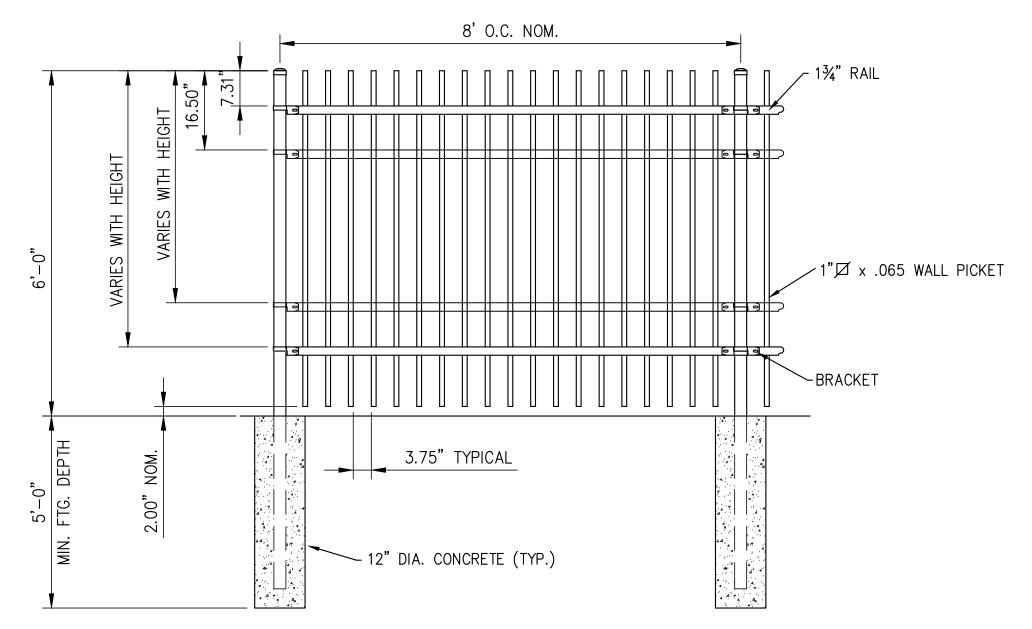
CONSTRUCTION DETAILS

DRAWN BY: JPH
CHECKED BY: MSA

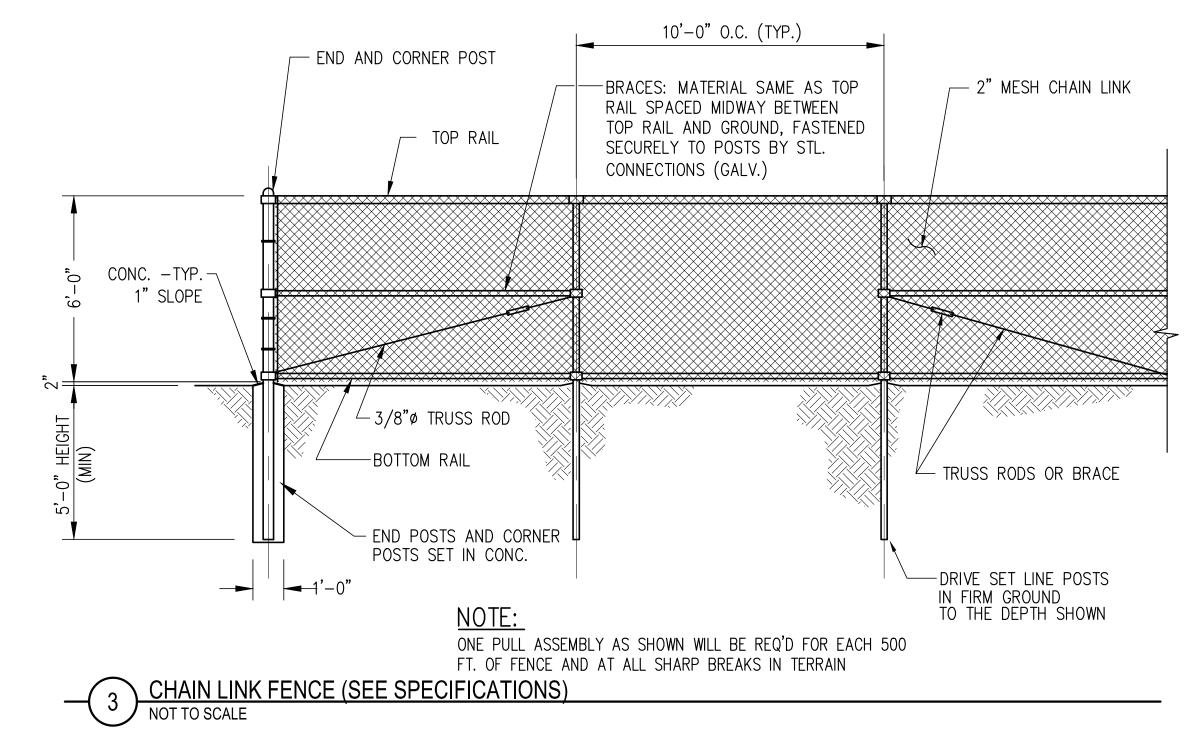
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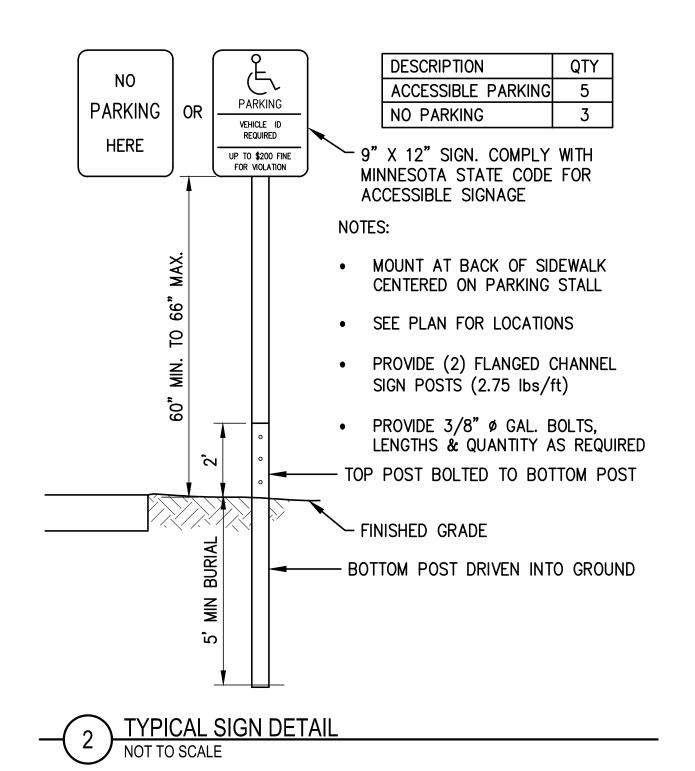
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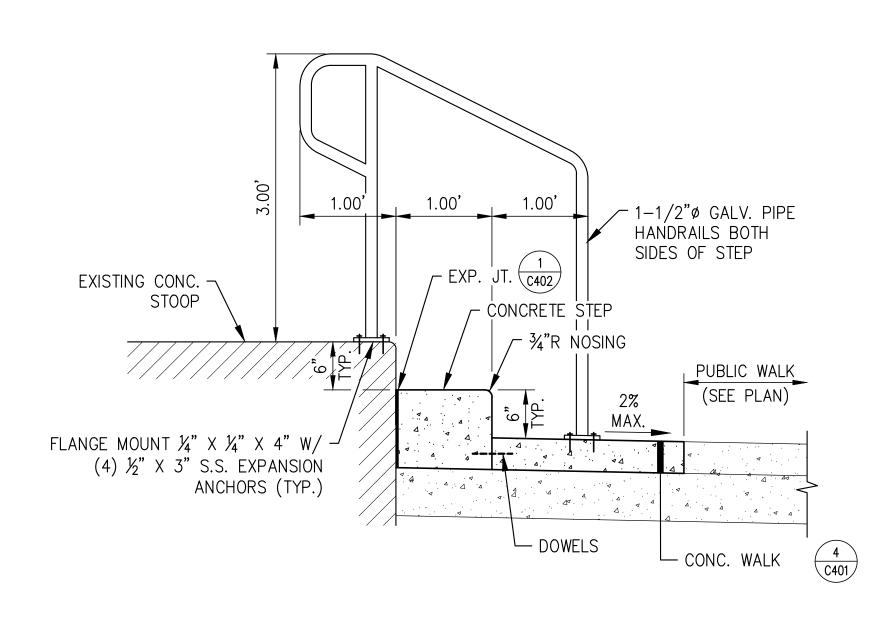




ORNAMENTAL FENCE (SEE SPECIFICATIONS)







STEP DETAIL



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SIGNATURE: | auii 4. haw

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DATE: <u>04/11/2023</u> REG. NO.: <u>41423</u>

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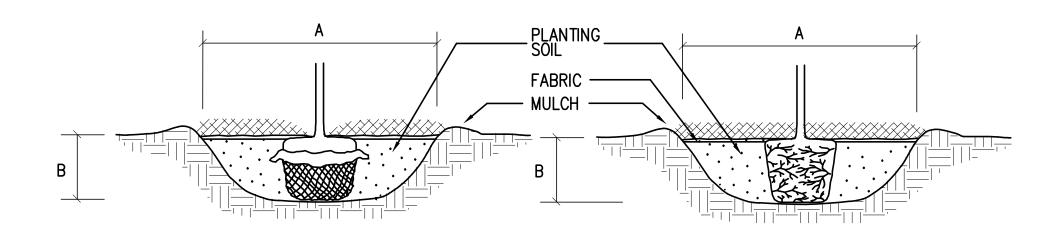
PROJECT NAME:

DTA OPERATIONS CENTER PARKING LOT

2402 WEST MICHIGAN ST. DULUTH, MINNESOTA 55806

CONSTRUCTION **DETAILS**

DRAWN BY: JPH CHECKED BY: MSA PROJ. NO: 190728 DRAWING NO:



SCARIFY SIDES AND BOTTOM OF HOLE. 2. PROCEED WITH CORRECTIVE PRUNING AS

BALLED & BURLAPPED

3. SET PLANT ON UNDISTURBED NATIVE SOIL, OR THOROUGHLY COMPACTED PLANTING SOIL SO THE ROOT FLARE IS AT OR UP TO 2" ABOVE FINISHED GRADE.

DIRECTED BY LANDSCAPE ARCHITECT.

- 4. PLANT SHALL BE PLACED IN PLANTING HOLE WITH BURLAP AND WIRE BASKET, IF USED, INTACT.
- 5. SLIT REMAINING BURLAP AT 6" INTERVALS.
- 6. THE PLANT SHALL BE BACKFILLED TO WITHIN 12" OF THE TOP OF THE ROOTBALL, THEN WATER. THE BURLAP OR WIRE BASKET SHALL BE REMOVED FROM TOP 1/3 OF BALL. REMOVE TWINE.
- 7. PLUMB AND BACKFILL WITH PLANTING SOIL SPECIFIED.
- 8. WATER THOROUGHLY WITHIN 2 HOURS. TO FILL VOIDS AND SETTLE PLANTS.
- 9. CREATE A 4" DEPTH WATERING BASIN. 10. BACKFILL VOIDS AND WATER A 2ND TIME.
- 11. PLACE MULCH WITHIN 48 HOURS OF THE SECOND WATERING UNLESS SOIL IS SATURATED.
- 12. DO NOT BURY ROOT FLARE OF TREE.

CONTAINER STOCK

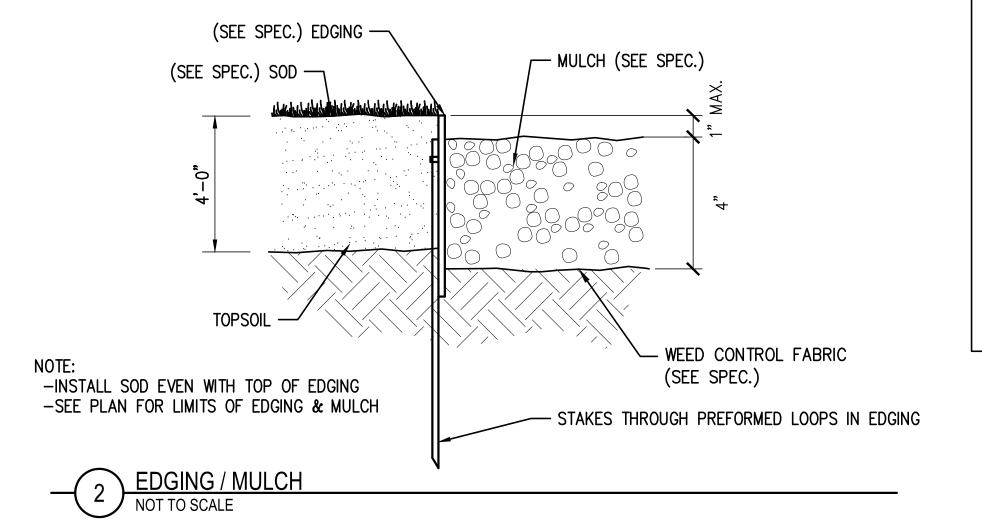
- SCARIFY SIDES AND BOTTOM OF HOLE. 2. PROCEED WITH CORRECTIVE PRUNING AS DIRECTED BY LANDSCAPE ARCHITECT.
- 3. REMOVE CONTAINER AND SCORE OUTSIDE OF SOIL MASS TO REDIRECT CIRCLING FIBROUS ROOTS AS NECESSARY.
- 4. SET PLANT ON UNDISTURBED NATIVE SOIL, OR THOROUGHLY COMPACTED BACKFILL SOIL. INSTALL PLANT SO TOP OF ROOT FLARE IS AT OR 2" ABOVE THE FINISHED GRADE.
- 5. PLUMB AND BACKFILL WITH PLANTING SOIL SPECIFIED.
- 6. WATER THOROUGHLY WITHIN 2 HOURS. TO FILL VOIDS AND SETTLE PLANTS.
- 7. CREATE A 4" DEPTH WATERING BASIN.
- 8. BACKFILL VOIDS AND WATER A 2ND
- 9. PLACE MULCH WITHIN 48 HOURS OF THE SECOND WATERING UNLESS SOIL IS SATURATED.

CONTRACTOR IS RESPONSIBLE FOR MAINTAINING TREES IN A PLUMB POSITION THROUGHOUT THE 16" POLYPROPYLENE OR POLYETHYLENE (40 MIL, 1-1/2" 2. SCARIFY BOTTOM AND SIDES OF HOLE WIDE STRAP) (TYPICAL) DO NOT PLANT TOO DEEP: EXPOSE TOP OF ROOT FLARE AND PULL DOUBLE STRAND 14 GA. MULCH AWAY FROM TRUNK. WIRE, 2 SPACED EQUALLY AT OPPOSITE SIDES MULCH (4" DEEP) TO LIMIT OF PLANTING HOLE REFER TO SPECIFICATION — PLANTING SOIL, PER →6'-0" STEEL STAKE SPECIFICATION 12" MIN SEED (OR SOD) ROOTBALL TO SIT ON SUBGRADE CUT ALL ROPES AND REMOVE INORGANIC CONTAINERS SUBGRADE **DECIDUOUS TREE PLANTING** NOT TO SCALE

1. IT IS THE CONTRACTORS OPTION TO STAKE TREES; HOWEVER, THE

GUARANTEE PERIOD.

PRIOR TO PLANTING.



PLANTING HOLE DIMENSIONS				
PLANT TYPE	PLANT SIZE (UP TO AND INCLUDING)	MINIMUM HOLE WIDTH (INCHES) A	APPROXIMATE HOLE DEPTH (INCHES) B	
EVERGREEN TREES	3' B.B. 4' B.B. 5' B.B. 6' B.B. 7' B.B. 8' B.B. 9' B.B. 10' B.B.	42 51 60 66 72 81 90 102	11 13 13 15 16 18 20 21	
SHADE & FLOWERING TREES	1" B.R. 1 1/4" B.R. 1 1/2" B.R. 1 3/4" B.R. 2" B.R. 2" B.B. 2 1/2" B.B. 3" B.B. 3 1/2" B.B. 4" B.B.	54 60 66 72 84 72 84 96 114	14 14 15 16 19 16 19 20 23 25	
EVERGREEN SHRUBS (UPRIGHT)	2' B.B. 3' B.B. 4' B.B.	36 48 63	9 12 14	
EVERGREEN SHRUBS (SPREADING)	18" spread B.B. 2' spread B.B. 2 1/2' spread B.B. 3' spread B.B.	30 36 3. 42 48	8 9 11 12	
DECIDUOUS SHRUBS	18" B.R. 2' B.R. 3' B.R. 4' B.R. 5' B.R. 6' B.R. 18" B.B. 2' B.B. 3' B.B. 4' B.B. 5' B.B.	30 33 42 48 54 60 27 30 36 42 48 54	8 9 11 12 14 14 7 8 9 11 12 14	
CONTAINER GROWN PLANTS	#1 cont. #2 cont. #3 cont. #5 cont. #7 cont. #15 cont.	23 26 30 36 42 51	7 9 10 13 13	

PLANTING DETAILS

PLANT LIST:

COMMON NAME	BOTANICAL NAME	SIZE	NOTES
NORTHWOOD RED MAPLE	ACER RUBRUM 'NORTHWOOD'	3" B&B	30' O.C.
AMERICAN BASSWOOD	TILIA AMERICANA	3" B&B	30' O.C.
BLACK CHOKEBERRY	ARONIA MELONOCARPA	5 GAL	3.5' O.C.
DWARF BUSH HONEYSUCKLE	DIERVILLA LONICERA	2 GAL	3' O.C.
RUSSIAN CYPRESS	MICROBIOTA DECUSSATA	5 GAL	3' O.C.
GOLDFINGER POTENTILLA	POTENTILLA FRUTICOSA 'GOLDFINGER'	2 GAL	2.5' O.C.
EARLYBIRD ORIOLE DAYLILY	HEMEROCALLIS 'CENTERTON ONE'	1 GAL	2' O.C.
HOSTA SIEBOLDIANA ELEGANS	HOSTA SIEBOLDIANA 'ELEGANS'	1 GAL	2' O.C.

PLANTING NOTES:

- 1. THE PLANTING DETAILS REPRESENT ADEQUATELY DRAINED SOIL CONDITIONS. THE CONTRACTOR SHOULD EXERCISE DISCRETION IN SETTING PLANTS 1"-3" HIGHER IN POORLY DRAINED SOILS.
- 2. ON 2:1 SLOPES OR GREATER, DO NOT CONSTRUCT THE UPHILL HALF OF THE WATERING BASIN.
- ON WET, POORLY DRAINED SOILS, DO NOT CONSTRUCT WATERING BASIN.
- 4. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ADEQUATE DRAINAGE IN HEAVY, POORLY DRAINED, OR IMPERVIOUS SOILS.
- 5. INSTALL PLANTS IN A PLUMB POSITION.
- 6. MULCH DEPTH SHALL BE 4".
- 7. FABRIC (SEE PLAN FOR LOCATIONS AND SPECIFICATIONS FOR TYPE).



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DULUTH TRANSIT AUTHORITY (DTA)

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	04/11/2023	BIDDING	
NO	DATE	ISSUED FOR	

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my direct supervision and that I am a duly

Licensed Landscape Architect under the

TYPED OR PRINTED NAME: MARK S. ANDERSON DATE: <u>04/11/2023</u> REG. NO.: <u>12553</u>

laws of the State of Minnesota

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SIGNATURE: 1 anie 4. han

TYPED OR PRINTED NAME: DANIEL G. SHAW

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DATE: 04/11/2023 REG. NO.: 41423

PROJECT NAME: DTA OPERATIONS CENTER PARKING LOT

2402 WEST MICHIGAN ST. DULUTH, MINNESOTA 55806

LANDSCAPING **DETAILS**

DRAWN BY: JPH CHECKED BY: MSA PROJ. NO: 190728 DRAWING NO: