ELEVATION - 758.67 TOP WEST ANCHOR BOLT ON CONCRETE BASE TO LIGHT POLE, LOCATED AT THE NORTH END OF CONCRETE WALK AT SERVICE DRIVE INTO EAST SIDE OF

CONTROL POINTS - MI SOUTH SPCS 83

CP#1 CP#2 CP#3
M&B RED CAP PK NAIL M+B RED CAP
N 540582.2180 N 540472.9620 N 540377.7758 E 12758928.8811 E 12758745.6771 E 12758993.2483 ELEV 756.56 ELEV 757.84 ELEV 755.33

CP#4 CP#5
MINI MAG NAIL M+B RED CAP
N 540410.8948 N 540331.2498 E 12758857.2581 E 12758698.0700 ELEV 758.07 ELEV 757.39

EXISTING UNDERGROUND UTILITY DATA

STORM MH#1 RIM 758.41 4" PVC INV SW 755.16 4" PVC INV SW 755.16 6" PVC INV N 755.01 8" CLAY INV E 755.01 BOTTOM STRUCTURE 754.91 2' DIA RIM 3' DIA CONC BLOCK STRUCTURE

STORM CB#2 RIM 754.09 10" CLAY INV S 752.09

12" CLAY INV N 752.09 2'x2' SQ RIM 4' DIA CONC BLOCK STRUCTURE WATERMAIN MH#3 RIM 755.31

2' DIA RIM VAULT - NO SIZE GIVEN WATERMAIN MH#4 BOTTOM STRUCTURE 752.19 4'x6' VAULT WITH WATER AND VALVES

SANITARY MH#5 RIM 756.48 DID NOT GET INV INFO HIGH END OF A SAN RUN TO THE WEST.

STORM MH#6 RIM 756.70 10" PVC INV SE 753.50 10" PVC INV SW 753.50 10" CLAY INV N 753.20 2' DIA RIM 4' DIA CONC BLOCK STRUCTURE

STORM CB#7 RIM 755.81 10" PVC INV NW 753.71 BOTTOM STRUCTURE 753.26 2' DIA RIM 4' DIA CONC BLOCK STRUCTURE

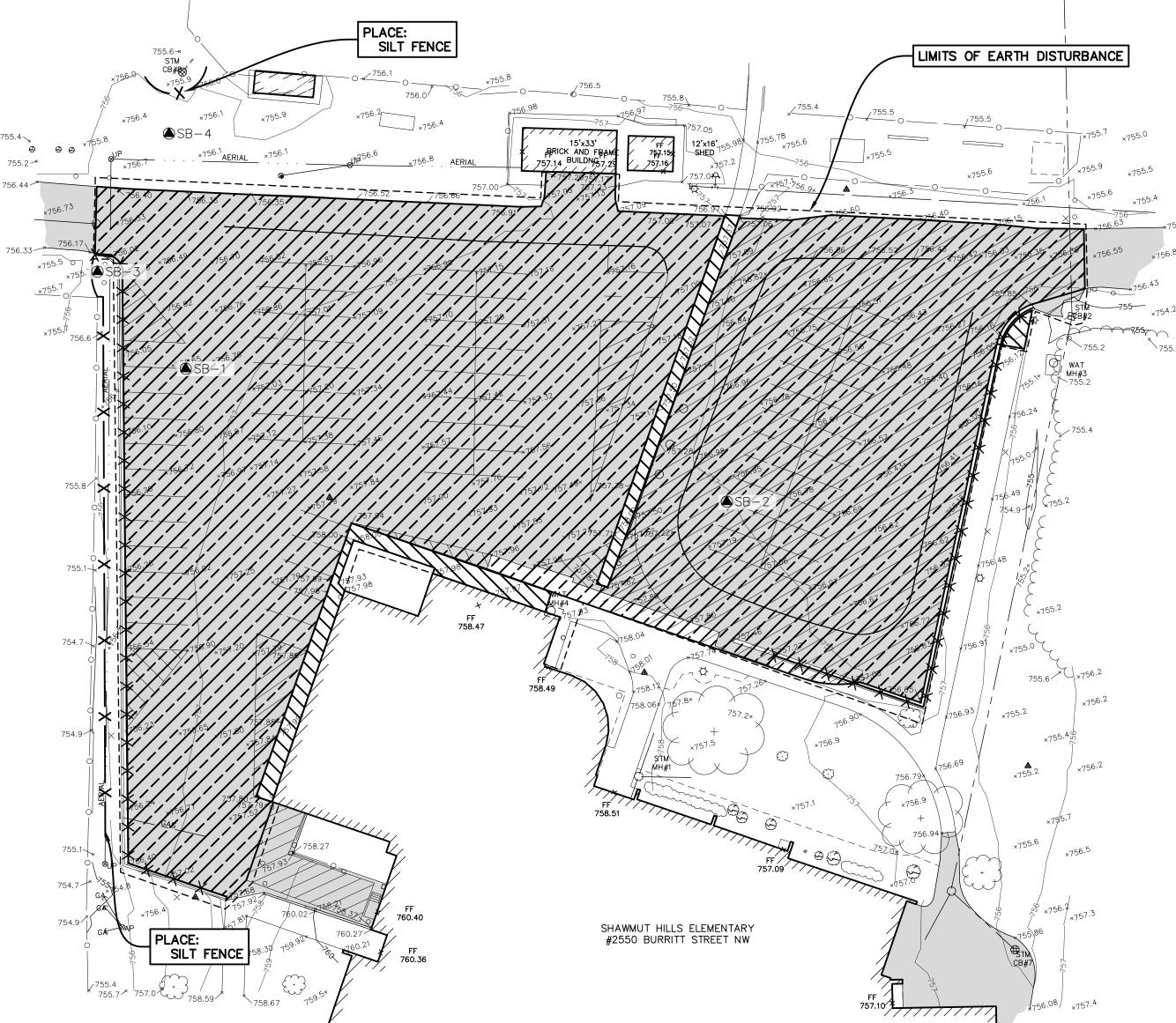
STORM CB#8 RIM 755.06 4" PVC INV E 752.56 2' DIA RIM 2' DIA CONC BLOCK STRUCTURE DO NOT KNOW WHERE IT GOES

STORM MH#9 RIM 753.49 12" CONC INV S 750.39 12" CMP INV N 750.24 BOTTOM STRUCTURE 750.09 2' DIA RIM 3' DIA PRECAST STRUCTURE

RIM 757.09 DID NOT OPEN MH#11 RIM 757.17 DID NOT OPEN

MH#12 RIM 757.23

DID NOT OPEN

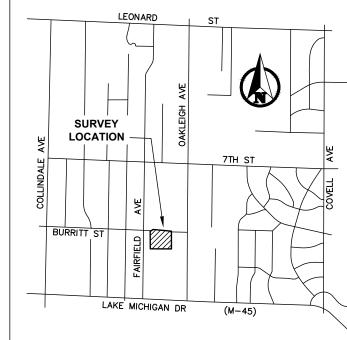


GENERAL DEMOLITION NOTES:

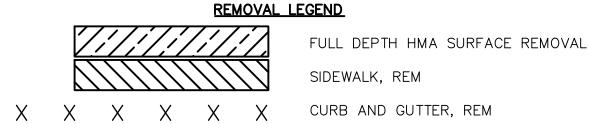
- 5. ALL SOIL EROSION CONTROL MEASURE SHALL BE IN PLACE PRIOR TO COMMENCEMENT OF EARTHWORK ACTIVITIES.
- 6. THE CONTRACTOR SHALL CLEAN PUBLIC STREETS DAILY OF ANY DIRT AND/OR DEBRIS FROM CONSTRUCTION SITE.

INLET PROTECTION NOTE

1. CLEANOUT ALL STORM MANHOLES AND CATCH BASINS LOCATED WITHIN PROJECT AREA



LOCATION MAP NO SCALE:



+Brugginl 3 Engineers



SHAWMUT GRAND RAPIDS, KEN

M+B 7-25-2

FIELD SURVEY / DATE PROJECT NO.: DESIGN DRAWN BY:

DESIGNED BY:

CHECKED BY:

SHEET NUMBER

Utility locations are approximate only.

Please contact "Miss Dig" three working days prior to the start of construction for exact locations. (1-800-482-7171)

SAND/CLAY-FINE .5'-2.4' CLAY BROWN 4'-5.5'

CLAY BROWN-WET SAND/CLAY-BROWN/FINE

ASPHALT GRAVEL BROWN DIRT SAND/CLAY SAND FINE CLAY LOAM-BROWN WET

1.3'-2.3' 2.3'-3' 3'-8.6' 8.6'-10' SAND- FINE WET

SOIL BORING DATA LIST

.2'-.86' GRAVEL

.86'-3.09' CLAY BROWN

DEPTH

SB #1 0 -.2'

SB #2 0 -.13' .13'-1.8' 1.8'-3.05' CLAY BROWN SB #3 0 -.4' .4'–1.3'

DESCRIPTION

ASPHALT

GROUND WATER PRESENT

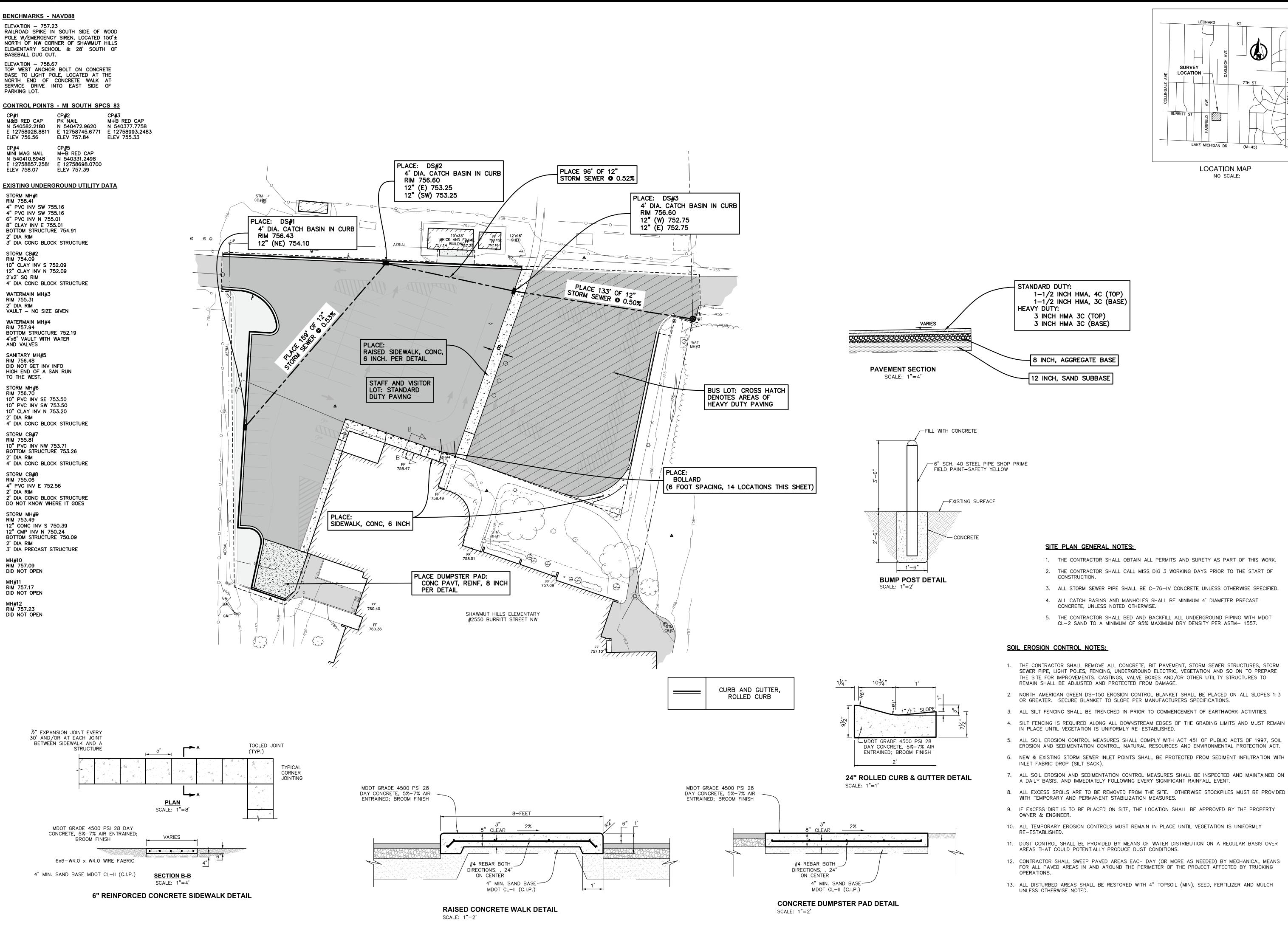
SB #4 0 -.5'

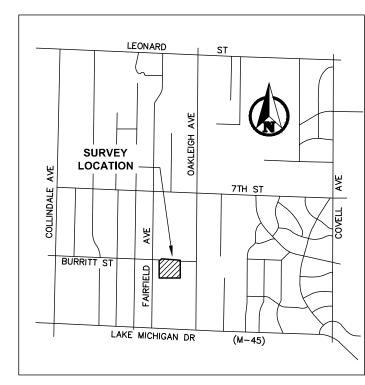
CLAY/LOAM-BROWN

1. THE CONTRACTOR SHALL OBTAIN ALL PERMITS AND SURETY AS PART OF 2. THE CONTRACTOR SHALL CALL MISS DIG 3 WORKING DAYS PRIOR TO THE START OF CONSTRUCTION. 3. THE CONTRACTOR SHALL REMOVE ALL CONCRETE, BIT PAVEMENT, STORM SEWER STRUCTURES, STORM SEWER PIPE, LIGHT POLES, FENCING, UNDERGROUND ELECTRIC, VEGETATION AND SO ON TO PREPARE THE SITE FOR IMPROVEMENTS. CASTINGS, VALVE BOXES AND/OR OTHER UTILITY STRUCTURES TO REMAIN SHALL BE ADJUSTED AND PROTECTED FROM 4. ALL SOIL EROSION CONTROL MEASURES SHALL COMPLY ACT 451 OF PUBLIC ACTS OF 1997, SOIL EROSION AND SEDIMENTATION CONTROL, NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION ACT.

PLAN SCALE: 1" = 30

Know what's **below.** Call before you dig.





LOCATION MAP NO SCALE:

PLAN SCALE: 1" = 30



Call before you dig

Bru



CL-2 SAND TO A MINIMUM OF 95% MAXIMUM DRY DENSITY PER ASTM- 1557.

CONCRETE, UNLESS NOTED OTHERWISE.

SOIL EROSION CONTROL NOTES:

- 1. THE CONTRACTOR SHALL REMOVE ALL CONCRETE, BIT PAVEMENT, STORM SEWER STRUCTURES, STORM SEWER PIPE, LIGHT POLES, FENCING, UNDERGROUND ELECTRIC, VEGETATION AND SO ON TO PREPARE THE SITE FOR IMPROVEMENTS. CASTINGS, VALVE BOXES AND/OR OTHER UTILITY STRUCTURES TO REMAIN SHALL BE ADJUSTED AND PROTECTED FROM DAMAGE.
- 2. NORTH AMERICAN GREEN DS-150 EROSION CONTROL BLANKET SHALL BE PLACED ON ALL SLOPES 1:3 OR GREATER. SECURE BLANKET TO SLOPE PER MANUFACTURERS SPECIFICATIONS.
- 3. ALL SILT FENCING SHALL BE TRENCHED IN PRIOR TO COMMENCEMENT OF EARTHWORK ACTIVITIES.
- 4. SILT FENCING IS REQUIRED ALONG ALL DOWNSTREAM EDGES OF THE GRADING LIMITS AND MUST REMAIN
- 5. ALL SOIL EROSION CONTROL MEASURES SHALL COMPLY WITH ACT 451 OF PUBLIC ACTS OF 1997, SOIL
- EROSION AND SEDIMENTATION CONTROL, NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION ACT. 6. NEW & EXISTING STORM SEWER INLET POINTS SHALL BE PROTECTED FROM SEDIMENT INFILTRATION WITH
- INLET FABRIC DROP (SILT SACK).
- 7. ALL SOIL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE INSPECTED AND MAINTAINED ON A DAILY BASIS, AND IMMEDIATELY FOLLOWING EVERY SIGNIFICANT RAINFALL EVENT.
- WITH TEMPORARY AND PERMANENT STABILIZATION MEASURES.
- 9. IF EXCESS DIRT IS TO BE PLACED ON SITE, THE LOCATION SHALL BE APPROVED BY THE PROPERTY
- OWNER & ENGINEER.
- 10. ALL TEMPORARY EROSION CONTROLS MUST REMAIN IN PLACE UNTIL VEGETATION IS UNIFORMLY RE-ESTABLISHED.
- 11. DUST CONTROL SHALL BE PROVIDED BY MEANS OF WATER DISTRIBUTION ON A REGULAR BASIS OVER AREAS THAT COULD POTENTIALLY PRODUCE DUST CONDITIONS.
- 12. CONTRACTOR SHALL SWEEP PAVED AREAS EACH DAY (OR MORE AS NEEDED) BY MECHANICAL MEANS
- FOR ALL PAVED AREAS IN AND AROUND THE PERIMETER OF THE PROJECT AFFECTED BY TRUCKING
- 13. ALL DISTURBED AREAS SHALL BE RESTORED WITH 4" TOPSOIL (MIN), SEED, FERTILIZER AND MULCH UNLESS OTHERWISE NOTED.

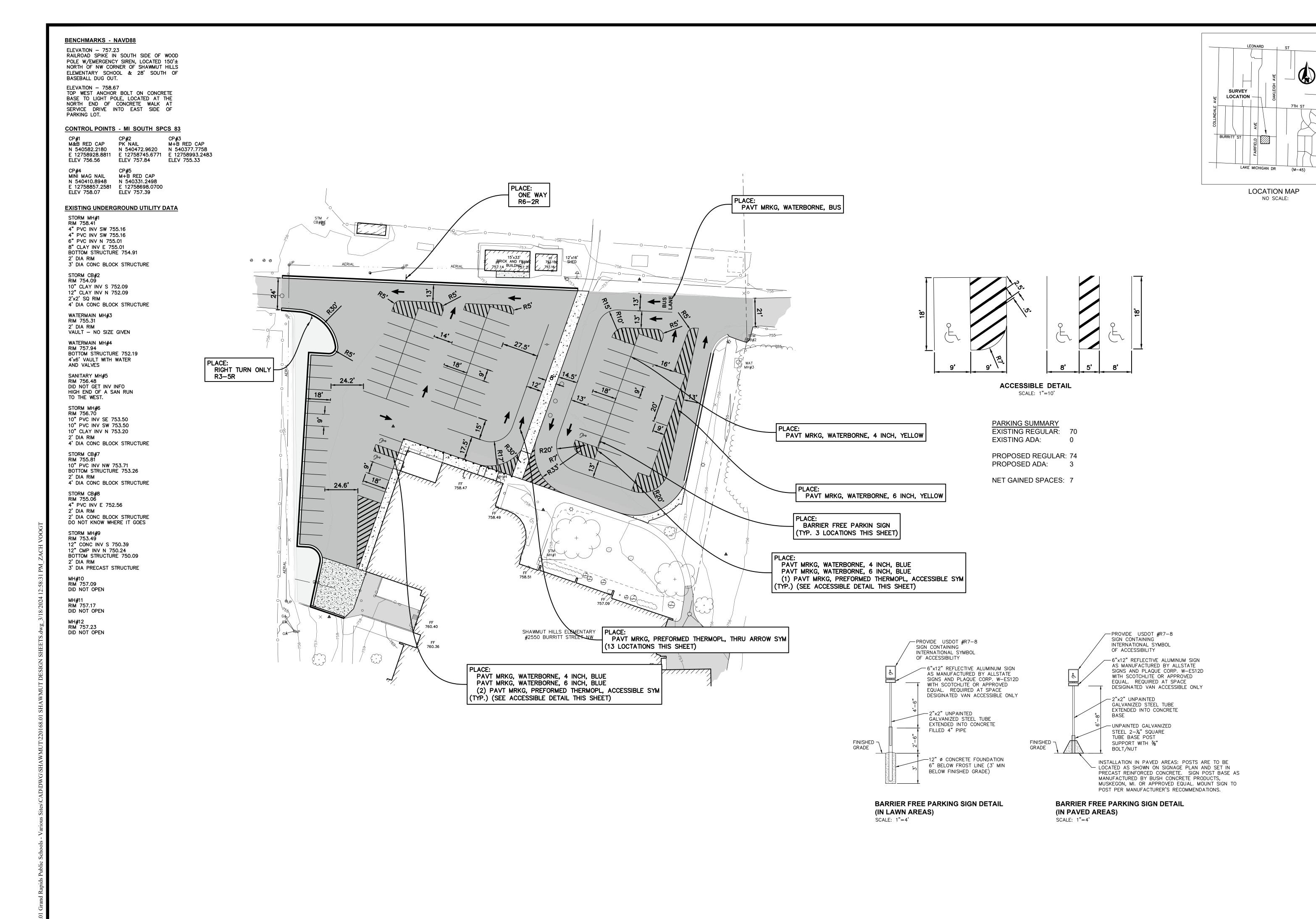
FIELD SURVEY / DATE M+B 7-25-2

PROJECT NO.: 220168.01 DESIGN DRAWN BY:

DESIGNED BY: CHECKED BY:

PLAN DATE: 01-24-2

SHEET NUMBER



PLAN SCALE: 1" = 30



Call before you dig.

Moore+Bruggin|
Consulting Engineers
2020 Monroe Ave.
Grand Rapids, MI 49505
(616) 363-9801 mailbox@mbce.c



SHAWMUT GRAND RAPIDS, KEN

FIELD SURVEY / DATE M+B 7-25-2

PROJECT NO.: 220168.0 DESIGN DRAWN BY:

> DESIGNED BY: CHECKED BY:

PLAN DATE: 01-24-23

SHEET NUMBER

2' DIA RIM

STORM CB#2 RIM 754.09

2'x2' SQ RIM

RIM 755.31 2' DIA RIM

WATERMAIN MH#3

WATERMAIN MH#4

AND VALVES SANITARY MH#5 RIM 756.48

TO THE WEST. STORM MH#6

RIM 756.70

2' DIA RIM

STORM CB#7 RIM 755.81

2' DIA RIM

STORM CB#8 RIM 755.06

2' DIA RIM

RIM 753.49

2' DIA RIM

3' DIA CONC BLOCK STRUCTURE

4' DIA CONC BLOCK STRUCTURE

10" CLAY INV S 752.09

12" CLAY INV N 752.09

VAULT - NO SIZE GIVEN

BOTTOM STRUCTURE 752.19

4'x6' VAULT WITH WATER

DID NOT GET INV INFO HIGH END OF A SAN RUN

10" PVC INV SE 753.50

10" PVC INV SW 753.50 10" CLAY INV N 753.20

10" PVC INV NW 753.71 BOTTOM STRUCTURE 753.26

4" PVC INV E 752.56

12" CONC INV S 750.39 12" CMP INV N 750.24 BOTTOM STRUCTURE 750.09

4' DIA CONC BLOCK STRUCTURE

4' DIA CONC BLOCK STRUCTURE

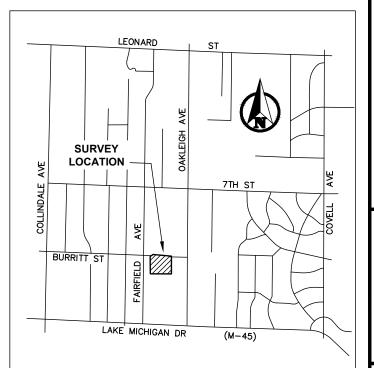
2' DIA CONC BLOCK STRUCTURE DO NOT KNOW WHERE IT GOES

PLACE:

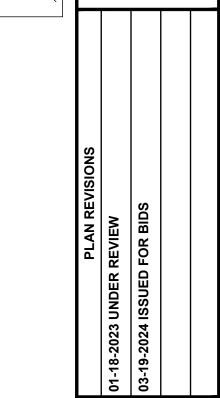
SILT FENCE

760.36

SILT FENCE 758.07 757.57 7757.69_(B) 757.69 (C) 757.69 757.53 (C) 757.92 (FLUSH) 757.90 (FLUSH) 757.53 757.97 (B) [≤]758.43 (C) 757.95 (B) 758.35 (757.93 (FLUSH) 758.00 (FLUSH), 756.94 INLET PROTECTION, SILT SACK (TYP. 4 LOCATIONS THIS SHEET)



LOCATION MAP NO SCALE:



PLAN SCALE: 1" = 30

Know what's **below.** Call before you dig.

+Bru(Engineer



SOIL EROSION CONTROL NOTES: 1. THE CONTRACTOR SHALL REMOVE ALL CONCRETE, BIT PAVEMENT, STORM SEWER STRUCTURES, STORM SEWER PIPE, LIGHT POLES, FENCING, UNDERGROUND ELECTRIC, VEGETATION AND SO ON TO PREPARE

THE SITE FOR IMPROVEMENTS. CASTINGS, VALVE BOXES AND/OR OTHER UTILITY STRUCTURES TO

INLET PROTECTION NOTE

1. CLEANOUT ALL STORM MANHOLES AND CATCH BASINS LOCATED WITHIN PROJECT AREA

REMAIN SHALL BE ADJUSTED AND PROTECTED FROM DAMAGÉ.

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WITH TEMPORARY AND PERMANENT STABILIZATION MEASURES. 9. IF EXCESS DIRT IS TO BE PLACED ON SITE, THE LOCATION SHALL BE APPROVED BY THE PROPERTY

10. ALL TEMPORARY EROSION CONTROLS MUST REMAIN IN PLACE UNTIL VEGETATION IS UNIFORMLY

11. DUST CONTROL SHALL BE PROVIDED BY MEANS OF WATER DISTRIBUTION ON A REGULAR BASIS OVER AREAS THAT COULD POTENTIALLY PRODUCE DUST CONDITIONS.

12. CONTRACTOR SHALL SWEEP PAVED AREAS EACH DAY (OR MORE AS NEEDED) BY MECHANICAL MEANS FOR ALL PAVED AREAS IN AND AROUND THE PERIMETER OF THE PROJECT AFFECTED BY TRUCKING

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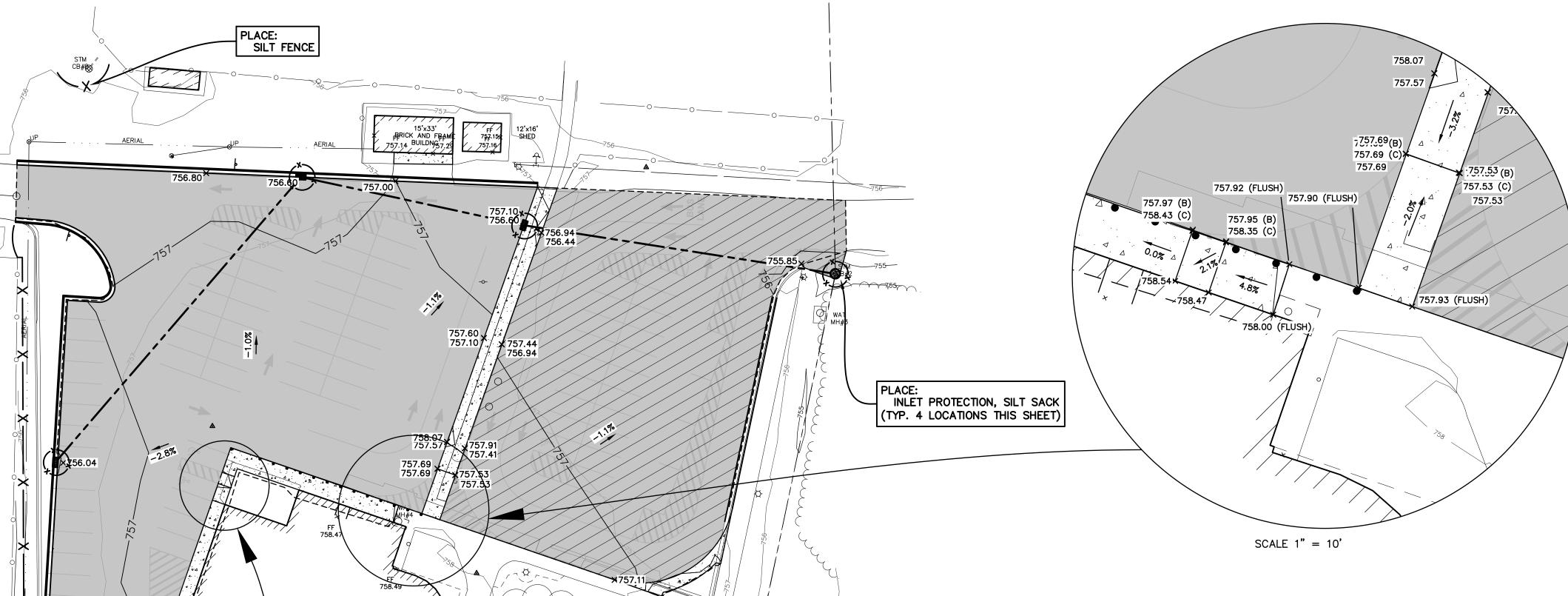
FIELD SURVEY / DATE M+B 7-25-2 PROJECT NO.:

DESIGN DRAWN BY: DESIGNED BY:

220168.0

CHECKED BY: **PLAN DATE:**

> 01-24-23 SHEET NUMBER



SHAWMUT HILLS ELEMENTARY

#2550 BURRITT STREET NW

757.94 (B)

758.44 (C)

SCALE 1" = 10

757.93 (FLUSH)

757.91 (FLUSH)

757.90 (B)

758.34 (C)

3' DIA PRECAST STRUCTURE RIM 757.09 RIM 757.23 DID NOT OPEN

DID NOT OPEN RIM 757.17 DID NOT OPEN