LEGEND

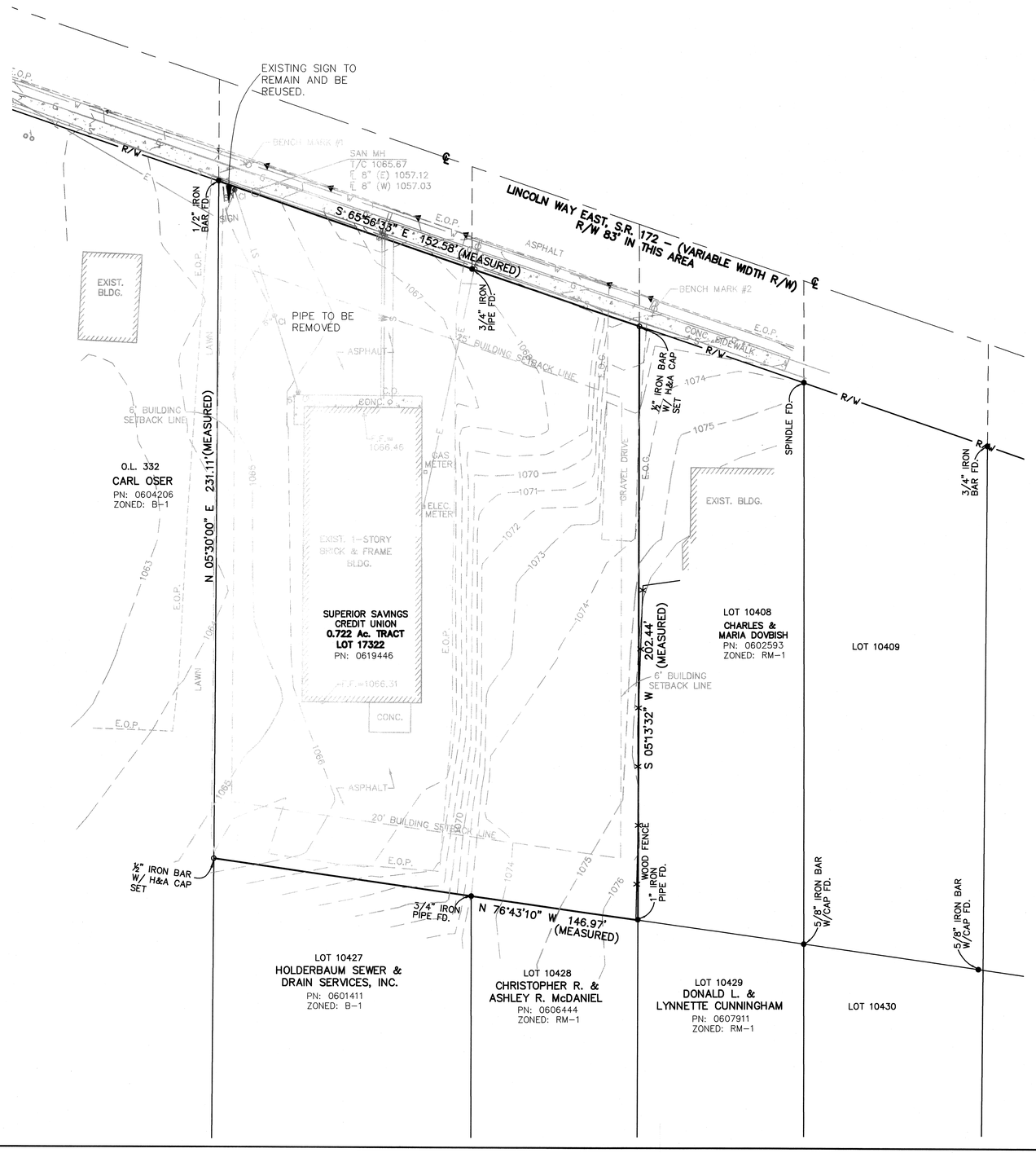
R/W	RIGHT OF WAY
℄	CENTER LINE
P.L.	PROP.ERTY LINE
L	LOT LINE
●	EX. MONUMENT FOUND (AS NOTED)
○	1/2 INCH IRON BAR W/ H&A CAP SET
( )	RECORD BEARINGS & DISTANCES
E.O.P.	EDGE OF PAVEMENT
F.F.	FINISH FLOOR ELEVATION
———	FENCE (AS NOTED)
———	GUARD RAIL
▣	MAILBOX
⊙	POST
	POWER POLE
	TELEPHONE POLE
	TELEPHONE/ LIGHT POLE
	TELEPHONE/ POWER POLE
	GENERAL POLE
	LIGHT POLE
	LIGHT/ POWER POLE
	LIGHT/ POWER/ TELEPHONE POLE
	LIGHT/ POWER/ TELEPHONE, CABLE TV POLE
	ANCHOR
———	RAIL ROAD
	SIGN (AS NOTED)
●	TREE (AS NOTED)
	H.C. RAMP W/ TRUNCATED DOME
T/G	TOP OF GRATE
T/C	TOP OF COVER
F.L.	FLOW LINE
–TV–	CABLE LINE
⊠	CABLE BOX
–E–	ELECTRIC LINE
⊠	ELECTRIC BOX
–G–	GAS LINE
Ⓖ	GAS LINE MARKER
–S–	SANITARY SEWER LINE
○	EX. MANHOLE (AS NOTED)
●	PROP. MANHOLE (AS NOTED)
CO	CLEAN OUT
–ST–	STORM SEWER LINE
□	EX. STORM C.B.
■	PRO. STORM C.B.
YD	YARD DRAIN
FD	FLOOR DRAIN
RD	ROOF DRAIN
DS	DOWN SPOUT
–T–	TELEPHONE LINE
⊠	TELEPHONE BOX
–W–	WATER LINE
	EX. FIREHYDRANT
	PROP. FIREHYDRANT
	EX. VALVE (AS NOTED)
	PROP. VALVE (AS NOTED)
▲	CURB CUT
———	EX. CONTOUR LINE
———	PROP. CONTOUR LINE
980	CONTOUR LABEL
980.25 / 979.75	SPOT ELEVATION
◆	SOIL BORING
PN	PARCEL NUMBER
L.A.	LANDSCAPE AREA
TW / GW	TOP OF WALL ELEV. / GRADE ELEV. AT WALL

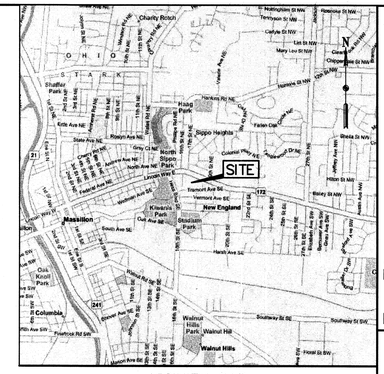
BENCHMARK #1:
CHISELED "X" ON NORTH FLANGE BOLT ON FIRE HYDRANT ON SOUTH SIDE OF LINCOLN WAY AT ADDRESS #1809.

ELEV. = 1066.66

BENCHMARK #2:
MAG NAIL SET +/– 2' UP SOUTH SIDE POWER POLE #2621A3-67 AT SOUTH SIDE OF LINCOLN WAY AT ADDRESS #1823.

ELEV. = 1073.50





VICINITY MAP
NOT TO SCALE

N

0' 10' 20' 40'
SCALE: 1"= 20'

INDEX OF SHEETS

SITE ADDRESS:
1815 LINCOLN WAY E.
MASSILLON, OHIO 44646

DEVELOPER
ROSEMAN CONSTRUCTION, INC.
1211 – 3RD STREET NW
MASSILLON, OH. 44648
PHONE: (330) 830-4655

OWNER
SUPERIOR SAVINGS CREDIT UNION
1224 OAK AVE. S.E.
MASSILLON, OH. 44646
PHONE: (330) 833-0751

ENGINEER / SURVEYOR
HAMMONTREE AND ASSOCIATES, LTD.
5233 STONEHAM ROAD
NORTH CANTON, OH. 44720
PHONE: (330)499-8817

Only approved signed plans by the City Engineer are to be used for construction.

Approved by the Massillon City Engineer this 1st Day of JUNE, 20 09.

Keith A. Dylewski, PE

STATE OF OHIO
JENNIFER L. SCHUMACHER
E-62851
REGISTERED
PROFESSIONAL ENGINEER
5-27-09

HAMMONTREE & ASSOCIATES, LTD.
ENGINEERS, PLANNERS, SURVEYORS
CANTON–AKRON–PITTSBURGH
5233 STONEHAM ROAD., NORTH CANTON, OHIO 44720
CANTON: (330)499-8817 AKRON:(330)633-7274
TOLL FREE: 1-800-394-8817 FAX: (330)499-0149
www.hammontree-engineers.com

REV. BY: ____ DATE: ____
REV. BY: ____ DATE: ____
REV. BY: ____ DATE: ____
REV. BY: ____ DATE: ____
REV. BY: ____ DATE: ____
R:\STARK\CITY MASSILLON\35\ROSLAW\2009-05-27-SITE.DWG

DESN. BY: JDS CHKD. BY: BHB
DRWN. BY: SRP RVWD. BY: BHB
FLD. BK.: 540 PAGE: 65
DATE: 05/06/09 © : 2009
LAYOUT: EX-SITE

SCALES
HORIZ: 1"=20'
VERT: N/A
CONTOUR. INT: N/A

EXISTING SITE PLAN
SUPERIOR SAVINGS CREDIT UNION
BEING LOT 17322
LOCATED IN THE CITY OF MASSILLON
STARK COUNTY, OHIO

1/5

ROSLIN

LEGEND

R/W	RIGHT OF WAY
℄	CENTER LINE
℘	PROP.ERTY LINE
ⱡ	LOT LINE
●	EX. MONUMENT FOUND (AS NOTED)
○	1/2 INCH IRON BAR W/ H&A CAP SET
( )	RECORD BEARINGS & DISTANCES
E.O.P.	EDGE OF PAVEMENT
F.F.	FINISH FLOOR ELEVATION
——	FENCE (AS NOTED)
——	GUARD RAIL
■	MAILBOX
◎	POST
ø	POWER POLE
ø	TELEPHONE POLE
ø	TELEPHONE/ LIGHT POLE
ø	TELEPHONE/ POWER POLE
ø	GENERAL POLE
ø	LIGHT POLE
ø	LIGHT/ POWER POLE
ø	LIGHT/ POWER/ TELEPHONE POLE
ø	LIGHT/ POWER/ TELEPHONE, CABLE TV POLE
⫫	ANCHOR
——	RAIL ROAD
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Ⓖ	GAS LINE MARKER
–S–	SANITARY SEWER LINE
○	EX. MANHOLE (AS NOTED)
●	PROP. MANHOLE (AS NOTED)
CO	CLEAN OUT
–ST–	STORM SEWER LINE
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–W–	WATER LINE
♉	EX. FIREHYDRANT
♉	PROP. FIREHYDRANT
⋈	EX. VALVE (AS NOTED)
⋈	PROP. VALVE (AS NOTED)
▲	CURB CUT
——	EX. CONTOUR LINE
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⊕	SOIL BORING
PN	PARCEL NUMBER
L.A.	LANDSCAPE AREA
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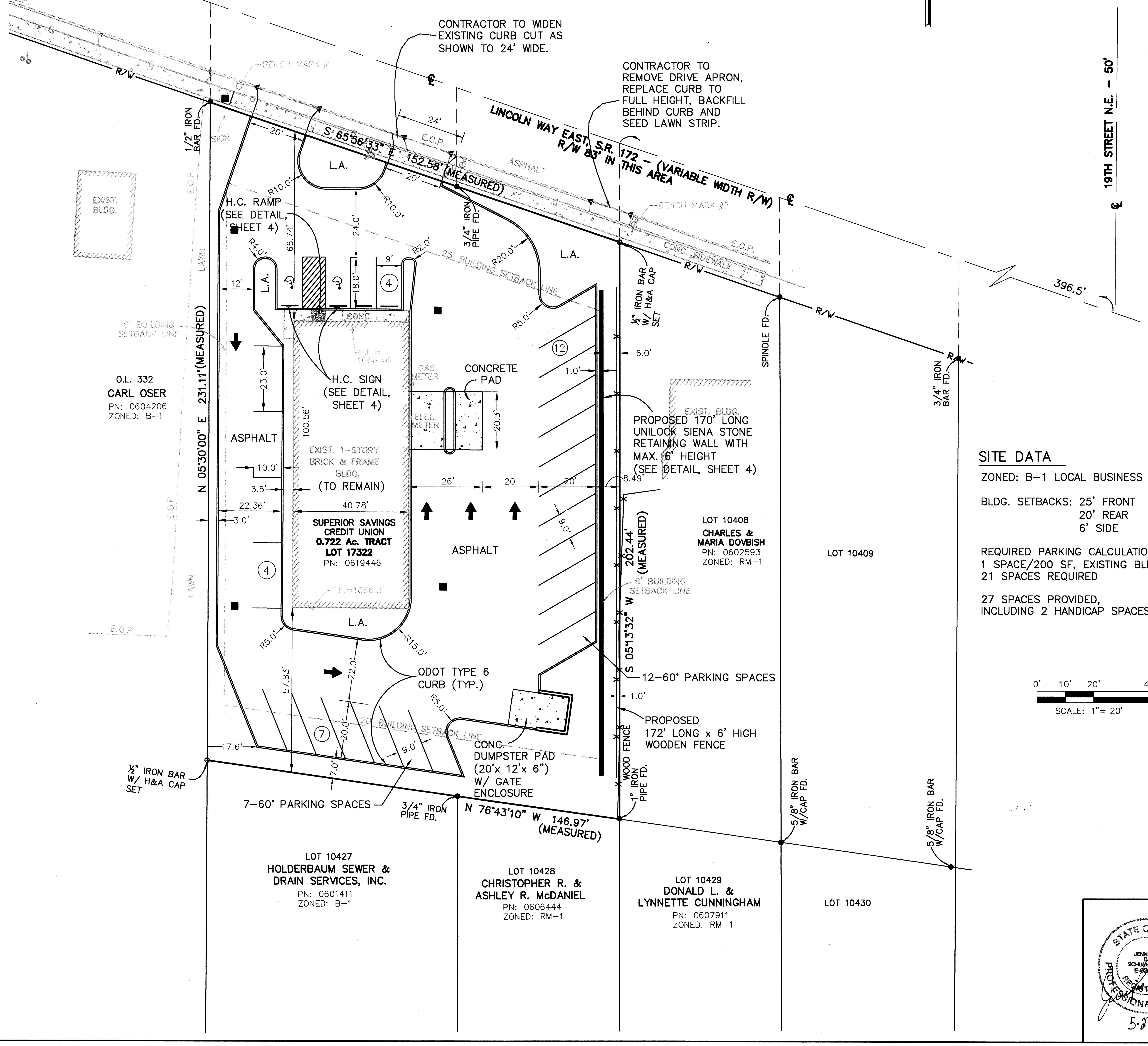
BENCHMARK #1:
CHISELED "X" ON NORTH FLANGE BOLT ON FIRE HYDRANT ON SOUTH SIDE OF LINCOLN WAY AT ADDRESS #1809.
ELEV. = 1066.66

BENCHMARK #2:
MAG NAIL SET +/- 2' UP SOUTH SIDE POWER POLE #2621A3-67 AT SOUTH SIDE OF LINCOLN WAY AT ADDRESS #1823.
ELEV. = 1073.50

NOTES:
1. CONCRETE/ DRIVEWAY PERMITS ARE REQUIRED FOR THIS SITE, CONTACT THE CITY OF MASSILLON ENGINEERING DEPARTMENT FOR LICENSE AND PERMIT REQUIREMENTS.
2. RIGHT OF WAY PERMITS ARE REQUIRED FOR ANY WORK IN STREET RIGHT-OF-WAY, CONTACT CITY OF MASSILLON ENGINEERING DEPARTMENT FOR LICENSE AND PERMIT REQUIREMENTS.
3. CONTRACTOR TO REMOVE EXISTING SIDEWALK ALONG PROPERTY FRONTAGE AND REPLACE WITH NEW 5' WIDE SIDEWALK PER CITY STANDARDS.



SITE DATA

ZONED: B-1 LOCAL BUSINESS

BLDG. SETBACKS: 25' FRONT
20' REAR
6' SIDE

REQUIRED PARKING CALCULATIONS:
1 SPACE/200 SF, EXISTING BLDG.=4089 SF
21 SPACES REQUIRED

27 SPACES PROVIDED,
INCLUDING 2 HANDICAP SPACES

0' 10' 20' 40'
SCALE: 1"= 20'

STATE OF OHIO
JENNIFER D. SCHUMACHER
E-62831
REGISTERED
PROFESSIONAL ENGINEER
[illegible]
5·27·09

HAMMONTREE & ASSOCIATES, LTD.
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CANTON: (330)/499-8817 AKRON:(330)/633-7274
TOLL FREE: 1-800-394-8817 FAX: (330)/499-0149
www.hammontree-engineers.com

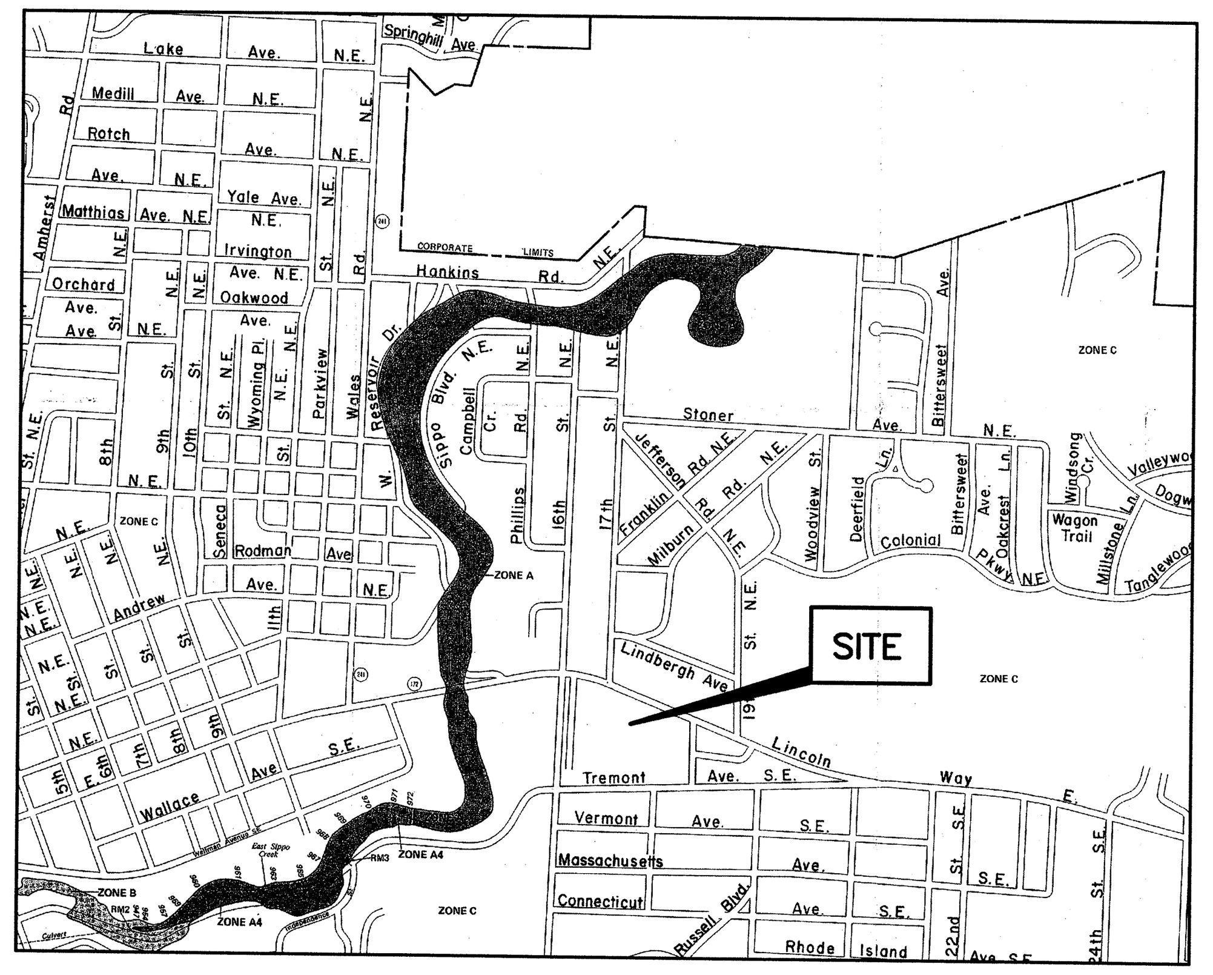
REV. BY: ____ DATE: ____ DESC.: ____
REV. BY: ____ DATE: ____ DESC.: ____
REV. BY: ____ DATE: ____ DESC.: ____
REV. BY: ____ DATE: ____ DESC ____
REV. BY: ____ DATE: ____ DESC.: ____
REV. BY: JDS DATE: 5/27/09 DESC.: ELIMINATED TWO PARKING SPACES
R:\STARK\CITY\MASSILLON\35\ROSLIN\2009-05-27-SITE.DWG

DESN. BY: JDS CHKD. BY: BHB
DRWN. BY: SRP RVWD. BY: BHB
FLD. BK.: 540 PAGE: 65
DATE: 05/06/09 ©: 2009
LAYOUT: SITE

SCALES
HORIZ: 1"=20'
VERT: N/A
CONTOUR. INT: N/A

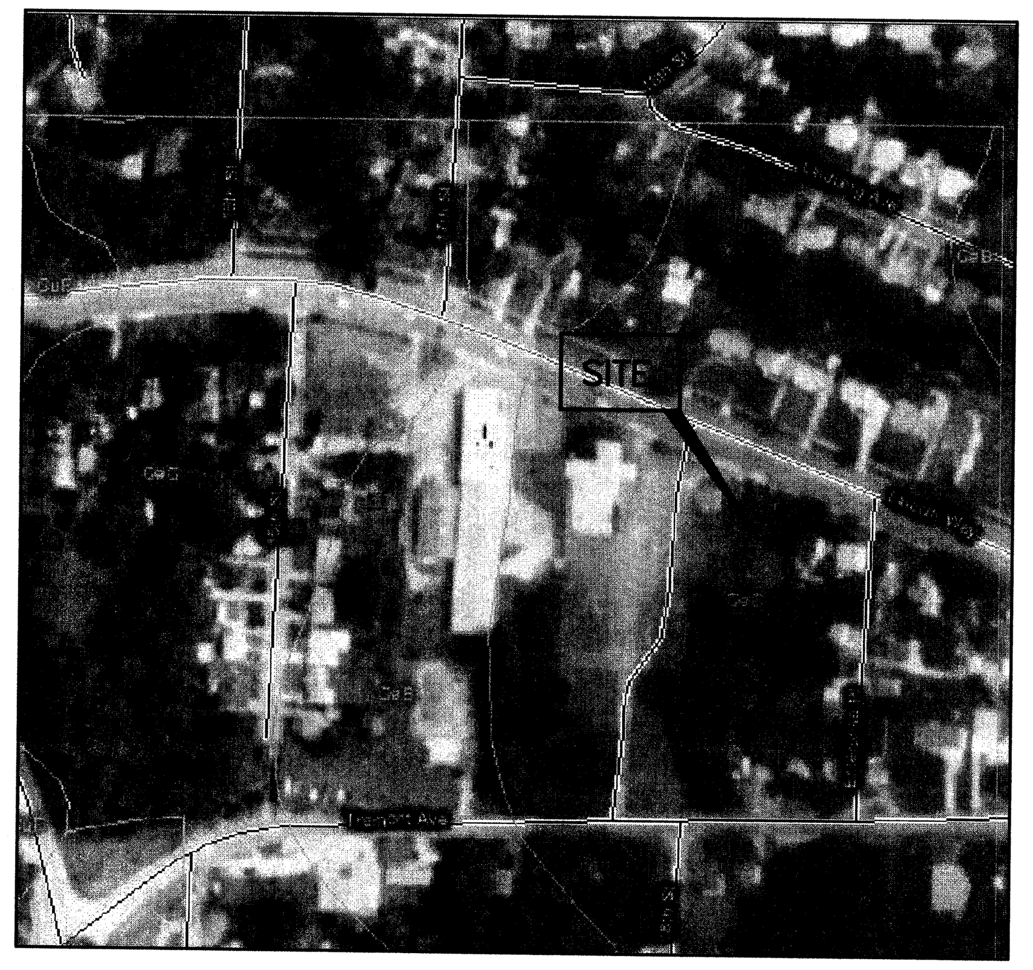
SITE DIMENSION PLAN
SUPERIOR SAVINGS CREDIT UNION
BEING LOT 17322
LOCATED IN THE CITY OF MASSILLON
STARK COUNTY, OHIO

ROSLIN



FLOOD ZONE

ACCORDING TO THE FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD INSURANCE RATE MAP, COMMUNITY PANEL NUMBER 390517 0002 C EFFECTIVE DATE JULY 5, 1982 THE SUBJECT PROPERTY IS WITHIN ZONE C WHICH IS DEFINED ON SAID MAP AS "AREAS OF MINIMAL FLOODING".

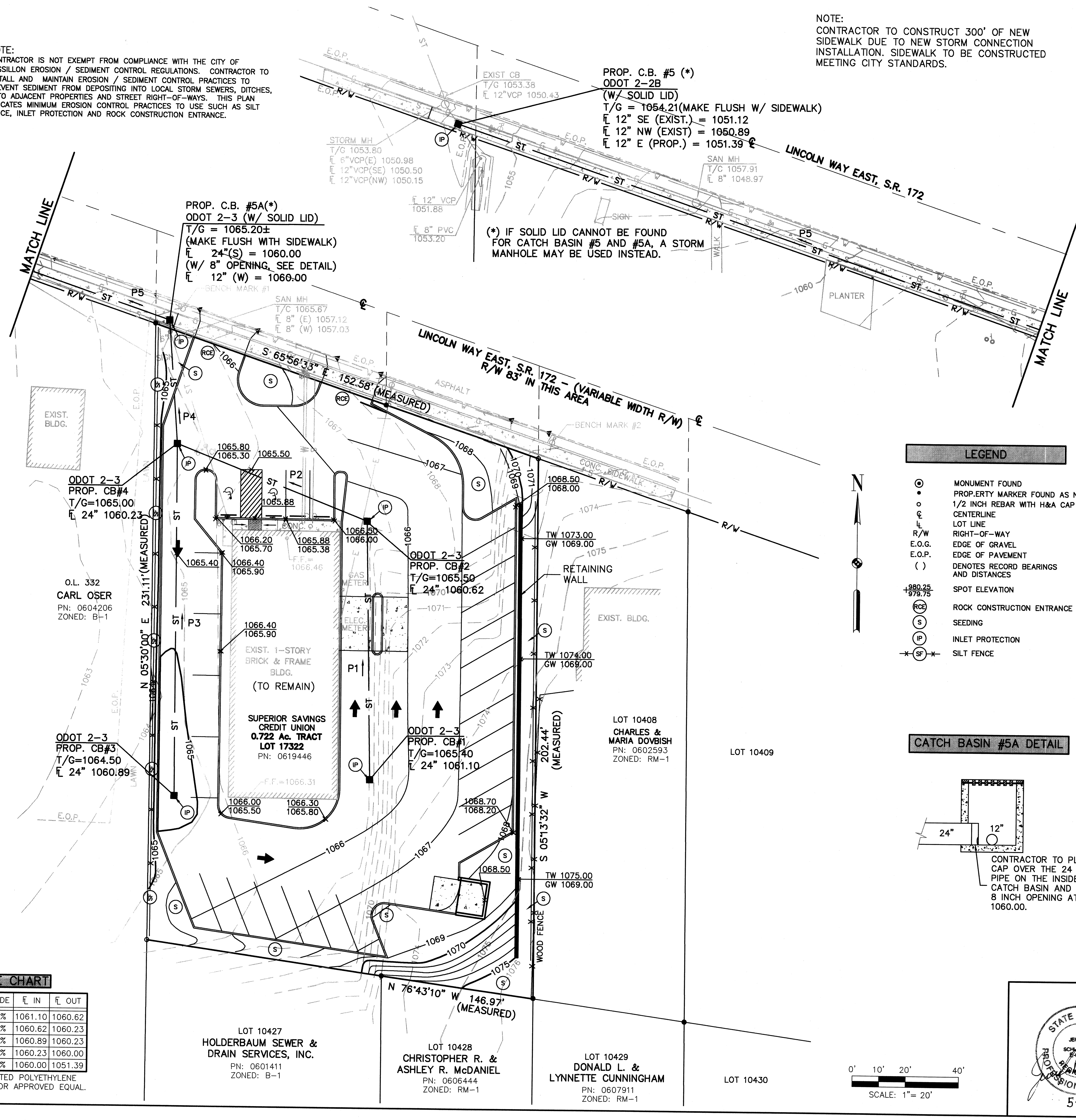


EXISTING SOILS ON SITE:

CeB	Canfield-Urban land complex, undulating
CeC	Canfield-Urban land complex, rolling
CuF	Chili-Urban land complex, steep

NOTE:
CONTRACTOR IS NOT EXEMPT FROM COMPLIANCE WITH THE CITY OF MASSILLON EROSION / SEDIMENT CONTROL REGULATIONS. CONTRACTOR TO INSTALL AND MAINTAIN EROSION / SEDIMENT CONTROL PRACTICES TO PREVENT SEDIMENT FROM DEPOSITING INTO LOCAL STORM SEWERS, DITCHES, ONTO ADJACENT PROPERTIES AND STREET RIGHT-OF-WAYS. THIS PLAN INDICATES MINIMUM EROSION CONTROL PRACTICES TO USE SUCH AS SILT FENCE, INLET PROTECTION AND ROCK CONSTRUCTION ENTRANCE.

NOTE:
CONTRACTOR TO CONSTRUCT 300' OF NEW SIDEWALK DUE TO NEW STORM CONNECTION INSTALLATION. SIDEWALK TO BE CONSTRUCTED MEETING CITY STANDARDS.



LEGEND

⊙	MONUMENT FOUND
•	PROP.ERTY MARKER FOUND AS NOTED
o	1/2 INCH REBAR WITH H&A CAP SET
℄	CENTERLINE
⅃	LOT LINE
R/W	RIGHT-OF-WAY
E.O.G.	EDGE OF GRAVEL
E.O.P.	EDGE OF PAVEMENT
( )	DENOTES RECORD BEARINGS AND DISTANCES
980.25 / 979.75	SPOT ELEVATION
(RCE)	ROCK CONSTRUCTION ENTRANCE
(S)	SEEDING
(IP)	INLET PROTECTION
-x-(SF)-x-	SILT FENCE

CATCH BASIN #5A DETAIL

CONTRACTOR TO PLACE A CAP OVER THE 24 INCH PIPE ON THE INSIDE OF THE CATCH BASIN AND DRILL AN 8 INCH OPENING AT ELEVATION 1060.00.

UTILITIES SHOWN WERE TAKEN FROM RECORDS OF RESPECTIVE UTILITY COMPANIES AND FROM A TOPOGRAPHIC SURVEY AND DO NOT NECESSARILY REPRESENT ALL UNDERGROUND OR OVERHEAD UTILITIES ADJACENT TO OR UPON THE PREMISES SHOWN ON THE PLAN. CALL OUPS PRIOR TO EXCAVATION.

BENCHMARK #1:
CHISELED "X" ON NORTH FLANGE BOLT ON FIRE HYDRANT ON SOUTH SIDE OF LINCOLN WAY AT ADDRESS #1809.
ELEV. = 1066.66

BENCHMARK #2:
MAG NAIL SET +/- 2' UP SOUTH SIDE POWER POLE #2621A3-67 AT SOUTH SIDE OF LINCOLN WAY AT ADDRESS #1823.
ELEV. = 1073.50

PROPOSED PIPE CHART

PIPE	SIZE	*TYPE	LENGTH	GRADE	℄ IN	℄ OUT
P1	24"	B	97'	0.5%	1061.10	1060.62
P2	24"	B	77'	0.5%	1060.62	1060.23
P3	24"	B	132'	0.5%	1060.89	1060.23
P4	24"	B	46'	0.5%	1060.23	1060.00
P5	12"	B	287'	3.0%	1060.00	1051.39

* USE R.C.P. (706.02), CORRUGATED POLYETHYLENE SMOOTH LINED PIPE (707.33) OR APPROVED EQUAL.

HAMMONTREE & ASSOCIATES, LTD.
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REV. BY: ___ DATE: ___ DESC.: ___
REV. BY: ___ DATE: ___ DESC.: ___
REV. BY: ___ DATE: ___ DESC.: ___
REV. BY: ___ DATE: ___ DESC ___
REV. BY: ___ DATE: ___ DESC.: ___
REV. BY: JDS DATE: 5/26/09 DESC.: SHIFTED WALL TO ACCOMODATE GEOGRID
R:\STARK\CITY\MASSILLON\35\ROSLIN\2009-05-27-SITE.DWG

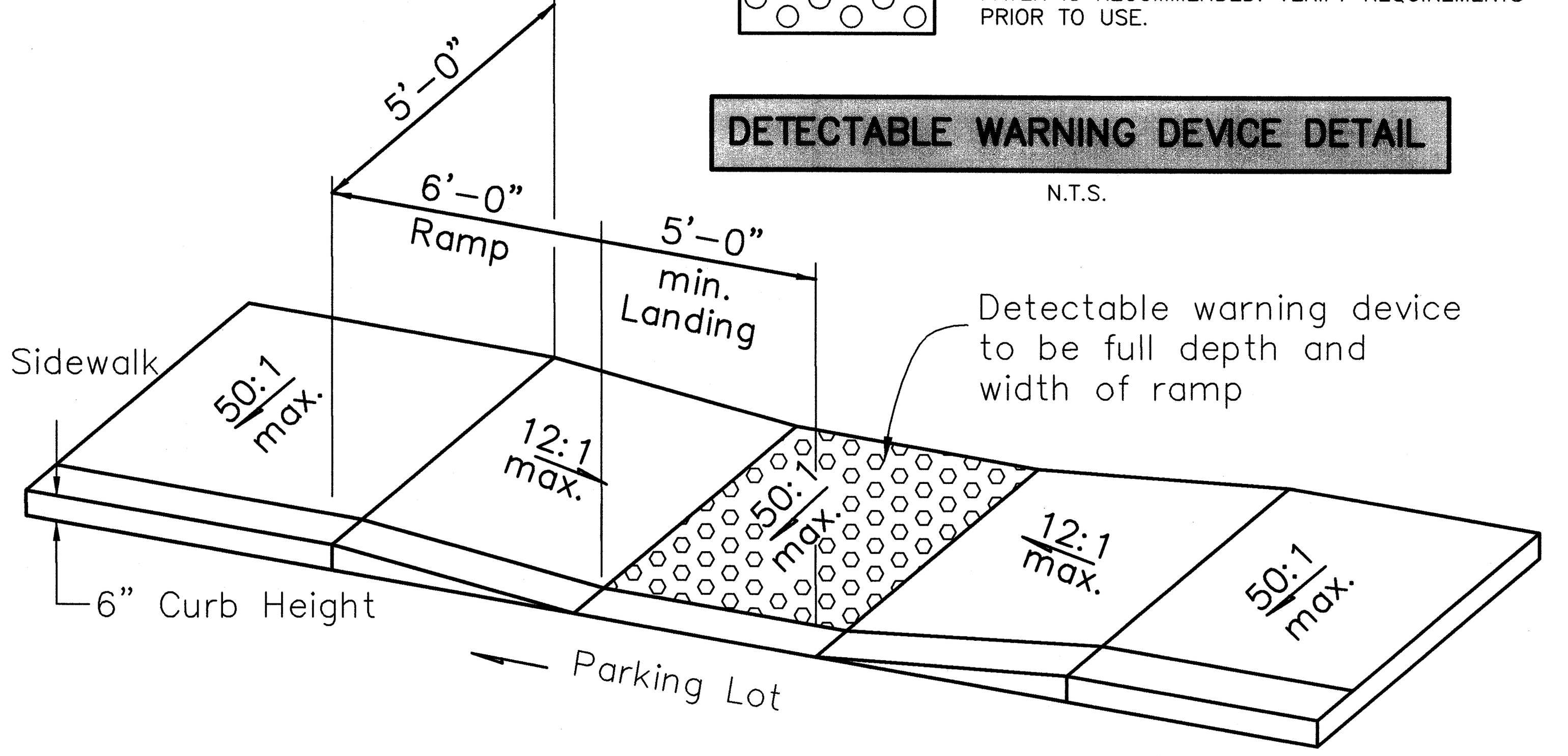
DESN. BY: JDS CHKD. BY: BHB
DRWN. BY: SRP RVWD. BY: BHB
FLD. BK.: 540 PAGE: 65
DATE: 05/06/09 ©: 2009
LAYOUT: GRADING

SCALES
HORIZ: 1"=20'
VERT: N/A
CONTOUR. INT: N/A

SITE GRADING & DRAINAGE PLAN
SUPERIOR SAVINGS CREDIT UNION
BEING LOT 17322
LOCATED IN THE CITY OF MASSILLON
STARK COUNTY, OHIO

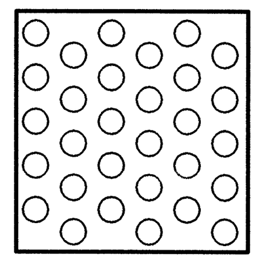
STATE OF OHIO
JENNIFER D. SCHUMACHER
E-62631
REGISTERED PROFESSIONAL ENGINEER
5-27-09

ROSLIN



RAMP TO COMPLY WITH ALL ADA CODES.

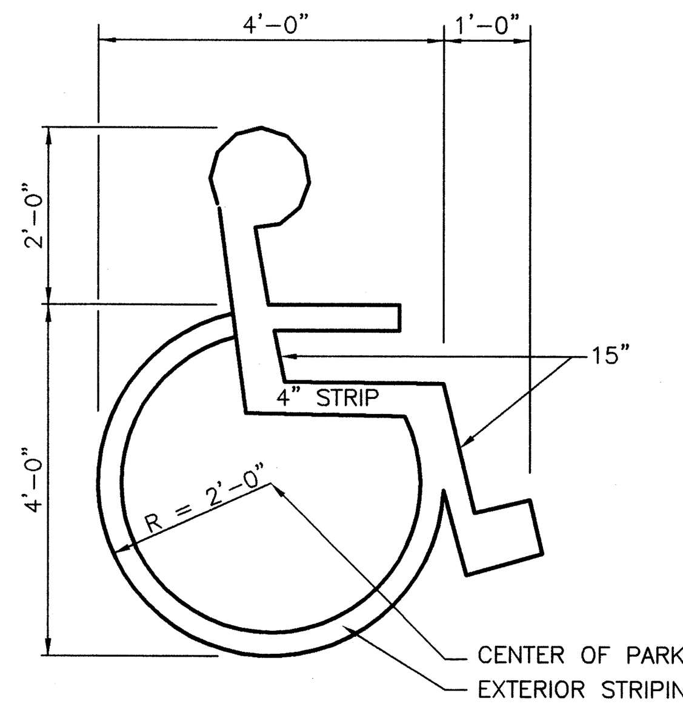
PARALLEL CURB RAMP DETAIL (SINGLE)



ADAAG STANDARDIZES DETECTABLE WARNINGS AS RAISED TRUNCATED DOMES WITH A NOMINAL 0.9" DIA., 0.2" HEIGHT AND NOMINAL 2.35" ON CENTER. COLOR OF TRUNCATED DOMES TO CONTRAST WITH SURROUNDING CONCRETE WALK AND RAMP. USE OF A RED BLEND MODULAR BRICK PAVER IS RECOMMENDED. VERIFY REQUIREMENTS PRIOR TO USE.

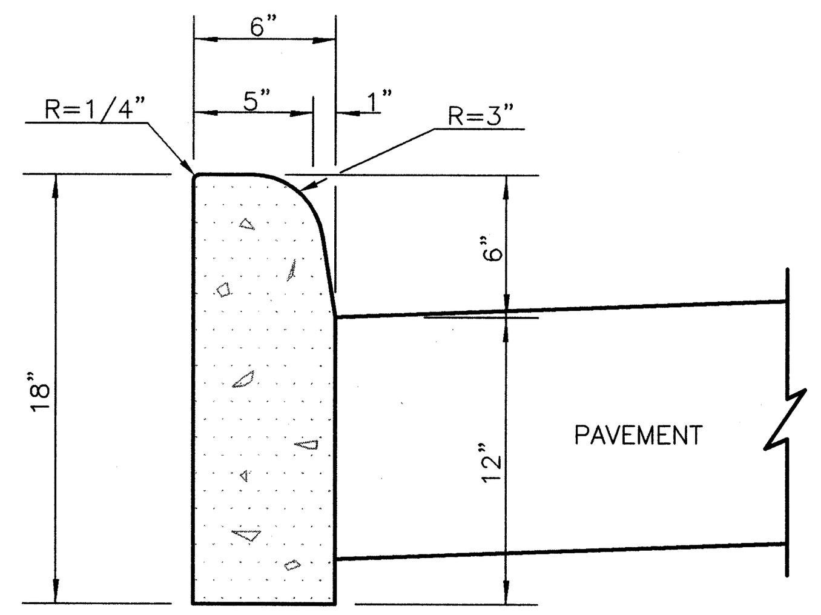
DETECTABLE WARNING DEVICE DETAIL

N.T.S.



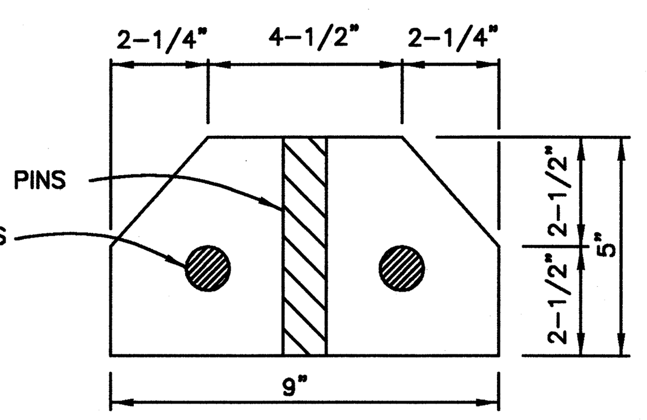
HANDICAPPED PARKING LOGO DETAIL

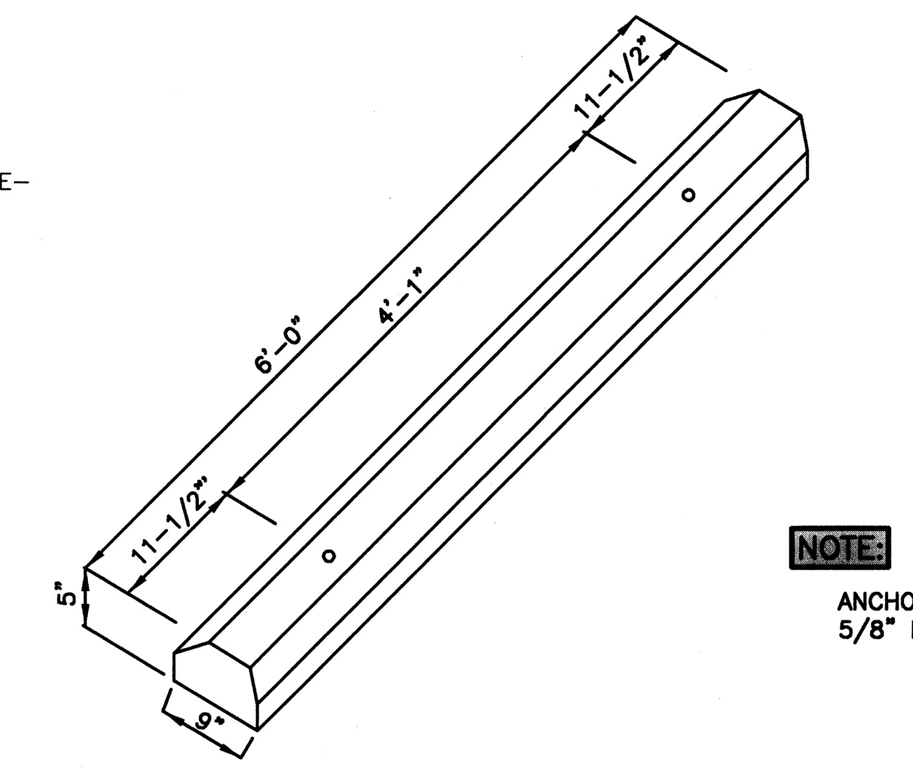
N.T.S.



ITEM 609 – TYPE 6 CONCRETE CURB

SCALE:1–1/2"=1'



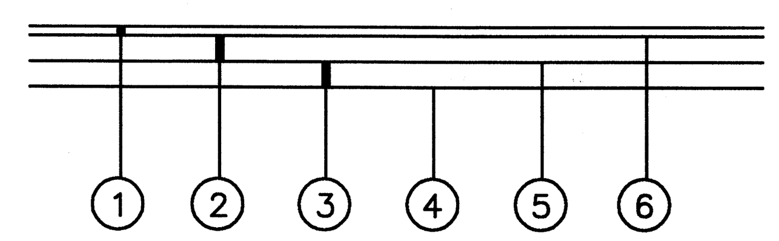


NOTE:

ANCHOR CURB WITH (2) 1'–6" 5/8" IRON REBAR

TYPICAL PRECAST PARKING CURB STOP DETAIL

NO SCALE



1) ITEM 448 1 1/2" ASPHALT CONCRETE
2) ITEM 301 3 1/2" ASPHALT CONCRETE BASE
3) ITEM 304 6" AGGREGATE BASE
4) ITEM 204 COMPACTED SUBGRADE
5) ITEM 408 PRIME COAT TO BE APPLIED AT THE RATE OF 0.4 GAL./SQ. YD.
6) ITEM 407 TACK COAT TO BE APPLIED AT THE RATE OF 0.1 GAL./SQ. YD.

ALL ITEMS FROM STATE OF OHIO DEPARTMENT OF TRANSPORTATION, CONSTRUCTION & MATERIAL SPECIFICATIONS, JAN. 1, 2008.

IF GEOTECHNICAL REPORT RECOMMENDS A DIFFERENT SECTION THEN THE GEOTECHNICAL CONSULTANTS RECOMMENDATIONS SHALL OVERRIDE THIS DETAIL.

ASPHALT PAVEMENT SECTION DETAIL

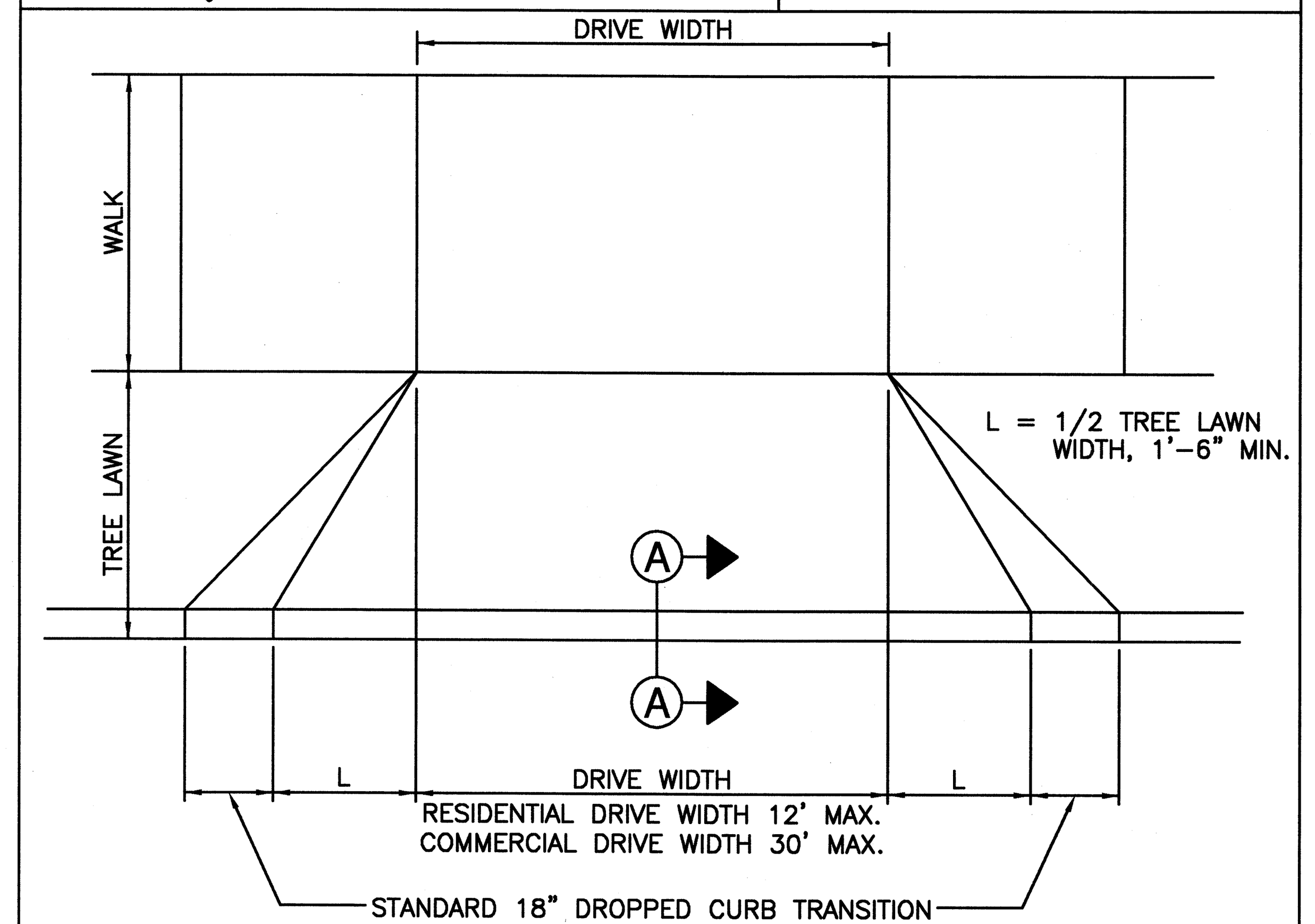
NTS

Francis H. Cicchinelli, Jr.
Mayor

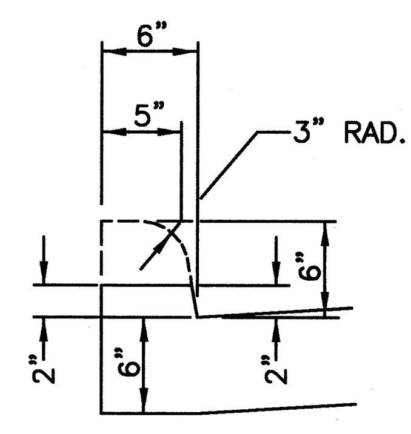
Massillon Means More!

CITY OF MASSILLON ENGINEERING
151 LINCOLN WAY EAST
MASSILLON, OHIO (330)830–1722
FAX: (330)830–1786

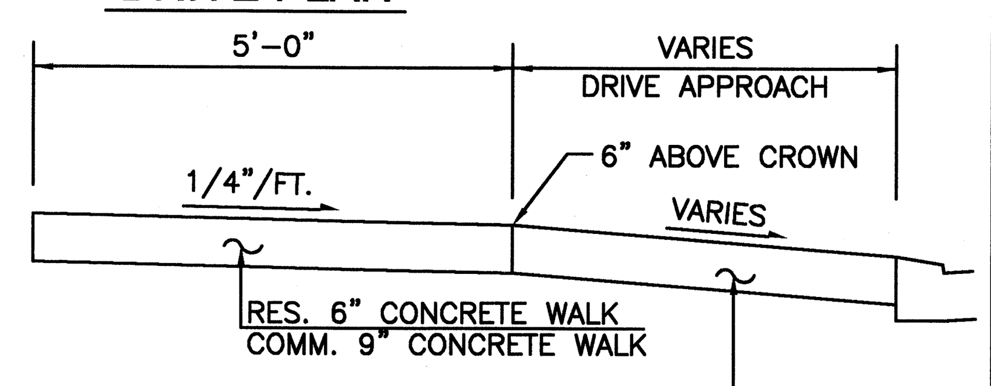
DRIVEWAY APPROACH DETAIL



DRIVE PLAN



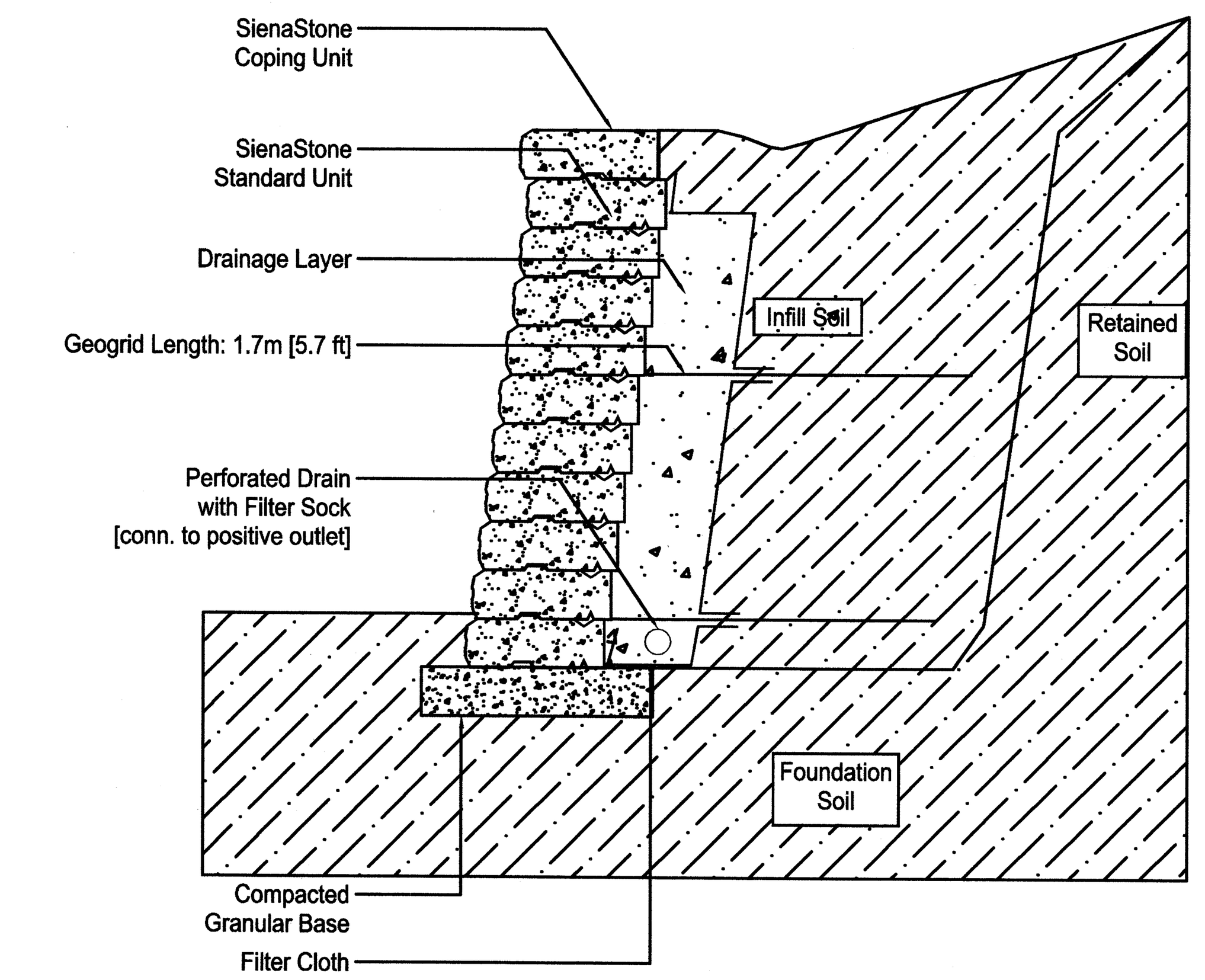
A-A



DRIVE PROFILE

NOTE

ANY DEVIATION FROM THIS MUST BE APPROVED BY THE CITY ENGINEER.



Design Specific Geometric Information

Retaining Wall System	SienaStone w/ Geogrid	Geogrid Type	See Notes
Maximum Height mm (in)	2050 (80)	Minimum Geogrid LTDS kN/m (lb/ft)	See Notes
Maximum Slope Above Wall	1V:3H	Maximum Slope Below Wall	None
Max. Surcharge Above Wall kPa (lb/sq.ft)	None	Depth of Embedment mm (in)	203 (8)
Batter of Wall	7.12°	Compacted Base Dimension mm (in)	879 x 186 (35 x 7)

Design Specific Soil Information

	Soil Region				
	Infill	Retained	Foundation	Base	Drainage
Description (by USCS)	SM Silty Sands	SM Silty Sands	SM Silty Sands	GW Well graded, free draining Granular	GP Free draining Clear Stone (3/4")
Effective Internal Friction Angle	32°	32°	32°	39°	NR
Moist Unit Weight kN/cu.m (lb/cu.ft)	19.7 (125)	19.7 (125)	20 (127)	22 (140)	NR
Effective Cohesion kPa (lb/sq.ft)	NR	NR	13 (270)	NR	NR
Soil Notes	Placed in 150mm (6in) lifts and compacted to 95% SPD.	Must be undisturbed dense soil or well compacted engineered fill.	The allowable bearing capacity must exceed 100kPa (2100 lb/sq.ft).	Well graded, crushed, non frost susceptible granular soil compacted to 98% SPD.	Min. 300mm (12") thick layer, wrapped in approved Filter Fabric

NR - Not Required

Notes:
1. This design meets or exceeds the minimum factors of safety required by Risi Stone Systems based on the design parameters listed above. The analysis was conducted in accordance with the National Concrete Masonry Association Design Manual for Segmental Retaining Walls, Second Edition.
2. This is a preliminary, non site-specific design. If used for construction, a qualified Engineer must be retained to review/approve the design, confirm site conditions, and inspect construction.
3. No analysis of global stability, total or differential settlement, or seismic effects has been performed.
4. This design is only provided to illustrate the general arrangement of the SRW structure. This drawing must be used in conjunction with the related Detail Drawings and Specifications for proper design and construction.
5. Structures such as handrails, guardrails, fences, terraces, and site conditions such as water applications, drainage and soil conditions, additional live and dead loads, etc., have significant effects on the wall design and must be reviewed/ approved by a qualified Engineer before being used in conjunction with this design.
6. For geogrid reinforced structures, a minimum Long Term Allowable Design Strength of 14 kN/m was assumed. Contact your manufacturer or Risi Stone Systems for a list of approved geogrid reinforcements.

UNILOCK® 1-800-UNILOCK www.unilock.com

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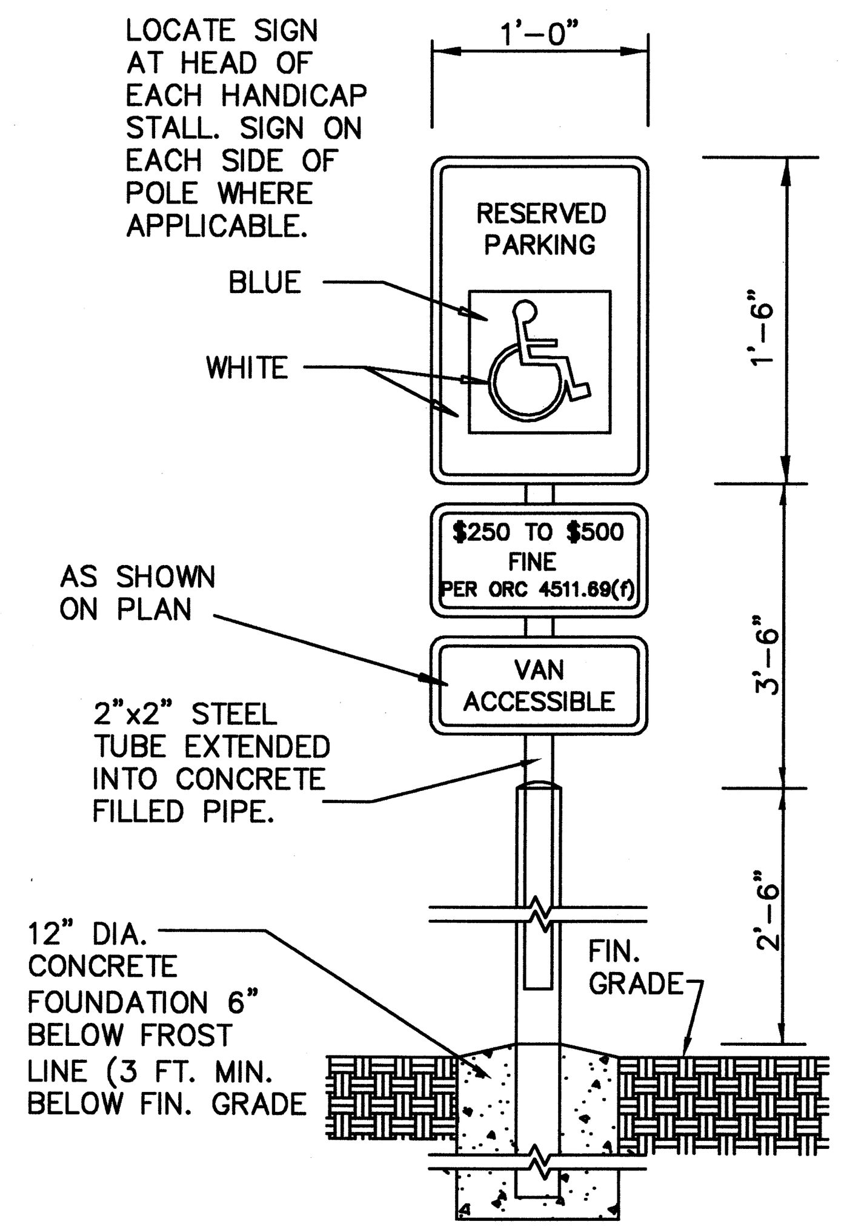
Unilock is a licenced manufacturer of Risi Stone Systems

RisiStone® retaining wall systems

8500 Leslie Street, Suite 390
Thornhill, Ontario
Canada, L3T 7M8
Tel 905.882.5898 Fax 905.882.4556
http://www.risistone.com

SienaStone® Retaining Wall Geogrid Section 2050mm (6.72ft)
Site: 3H:1V Slope - Silty Sands
Infill: Silty Sands
SS2RBSBN205



NOTES:
1. SIGNS ARE TO CONFORM WITH THE SPECIFICATIONS FROM THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.
2. SIGNS WILL BE MOUNTED ON GALVANIZED POLES OR ON WALL (WHERE APPLICABLE).
3. SIGNS SHALL COMPLY TO ALL ADA CODES.

HANDICAP PARKING SIGN W/BOLLARD

N.T.S.

HAMMONTREE & ASSOCIATES, LTD.
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DESN. BY: JDS CHKD. BY: BHB
DRWN. BY: SRP RVWD. BY: BHB
FLD. BK.: 540 PAGE: 65
DATE: 05/06/09 ©: 2009
LAYOUT: DETAILS

SCALES
HORIZ: 1"=20'
VERT: N/A
CONTOUR. INT: N/A

SITE NOTES & DETAILS
SUPERIOR SAVINGS CREDIT UNION
BEING LOT 17322
LOCATED IN THE CITY OF MASSILLON
STARK COUNTY, OHIO

STATE OF OHIO
JENNIFER D. SCHUMACHER E-62831
REGISTERED
PROFESSIONAL ENGINEER
[illegible]
5.27.09

ROSLIN

PERMANENT SEEDING

SEED MIX	SEEDING RATE		NOTES:
	LBS./ACRE	LBS./1,000 SQ. FEET	
GENERAL USE			
CREEPING RED FESCUE DOMESTIC RYEGRASS KENTUCKY BLUEGRASS	20–40 10–20 20–40	1/2–1 1/4–1/2 1/2–1	FOR CLOSE MOWING & FOR WATERWAYS WITH <2.0 FT/SEC VELOCITY
TALL FESCUE TURF–TYPE (DWARF) FESCUE	40–50 90	1–1 1/4 2 1/4	
STEEP BANKS OR CUT SLOPES			
TALL FESCUE CROWN VETCH TALL FESCUE	40–50 10–20 20–30	1–1 1/4 1/4–1/2 1/2–3/4	DO NOT SEED LATER THAN AUGUST
FLAT PEA TALL FESCUE	20–25 20–30	1/2–3/4 1/2–3/4	DO NOT SEED LATER THAN AUGUST
ROAD DITCHES AND SWALES			
TALL FESCUE TURF–TYPE (DWARF) FESCUE KENTUCKY BLUEGRASS	40–50 80 5	1–1 1/4 2 1/4 0.1	
LAWNS			
KENTUCKY BLUEGRASS PERENNIAL RYEGRASS	100–120	2 2	
KENTUCKY BLUEGRASS CREEPING RED FESCUE	100–120	2 1–1/2	FOR SHADED AREAS

SITE PREPARATION:

1. SUBSOILER, PLOW, OR OTHER IMPLEMENT SHALL BE USED TO REDUCE SOIL COMPACTION AND ALLOW MAXIMUM INFILTRATION. (MAXIMIZING INFILTRATION WILL HELP CONTROL BOTH RUNOFF RATE AND WATER QUALITY.) SUBSOILING SHOULD BE DONE WHEN THE SOIL MOISTURE IS LOW ENOUGH TO ALLOW THE SOIL TO CRACK OR FRACTURE. SUBSOILING SHALL NOT BE DONE ON SLIP–PRONE AREAS WHERE SOIL PREPARATION SHOULD BE LIMITED TO WHAT IS NECESSARY FOR ESTABLISHING VEGETATION.
2. THE SITE SHALL BE GRADED AS NEEDED TO PERMIT THE USE OF CONVENTIONAL EQUIPMENT FOR SEEDBED PREPARATION AND SEEDING.
3. TOPSOIL SHALL BE APPLIED WHERE NEEDED TO ESTABLISH VEGETATION.

SEEDBED PREPARATION:

1. LIME: AGRICULTURAL GROUND LIMESTONE SHALL BE APPLIED TO ACID SOIL AS RECOMMENDED BY A SOIL TEST. IN LIEU OF A SOIL TEST, LIME SHALL BE APPLIED AT THE RATE OF 100 POUNDS PER 1,000–SQ. FT. OR 2 TONS PER ACRE.
2. FERTILIZER: FERTILIZER SHALL BE APPLIED AS RECOMMENDED BY A SOIL TEST. IN PLACE OF A SOIL TEST, FERTILIZER SHALL BE APPLIED AT A RATE OF 25 POUNDS PER 1,000–SQ. FT. OR 1000 POUNDS PER ACRE OF A 10–10–10 OR 12–12–12 ANALYSES.
3. THE LIME AND FERTILIZER SHALL BE WORKED INTO THE SOIL WITH A DISK HARROW, SPRING–TOOTH HARROW, OR OTHER SUITABLE FIELD IMPLEMENT TO A DEPTH OF 3 INCHES. ON SLOPING LAND, THE SOIL SHALL BE WORKED ON THE CONTOUR.

SEEDING DATES AND SOIL CONDITIONS:

SEEDING SHOULD BE DONE MARCH 1 TO MAY 31 OR AUGUST 1 TO SEPTEMBER 30. IF SEEDING OCCURS OUTSIDE OF THE ABOVE–SPECIFIED DATES, ADDITIONAL MULCH AND IRRIGATION MAY BE REQUIRED TO ENSURE A MINIMUM OF 80% GERMINATION. TILLAGE FOR SEEDBED PREPARATION SHOULD BE DONE WHEN THE SOIL IS DRY ENOUGH TO CRUMBLE AND NOT FORM RIBBONS WHEN COMPRESSED BY HAND. FOR WINTER SEEDING, SEE THE FOLLOWING SECTION ON DORMANT SEEDING.

DORMANT SEEDINGS:

1. SEEDINGS SHOULD NOT BE MADE FROM OCTOBER 1 THROUGH NOVEMBER 20, DURING THIS PERIOD, THE SEEDS ARE LIKELY TO GERMINATE BUT PROBABLY WILL NOT BE ABLE TO SURVIVE THE WINTER.
2. THE FOLLOWING METHODS MAY BE USED FOR 'DORMANT SEEDING':

** FROM OCTOBER 1 THROUGH NOVEMBER 20, PREPARE THE SEEDBED, ADD THE REQUIRED AMOUNTS OF LIME AND FERTILIZER, THEN MULCH AND ANCHOR. AFTER NOVEMBER 20, AND BEFORE MARCH 15, BROADCAST THE SELECTED SEED MIXTURE. INCREASE THE SEEDING RATES BY 50% FOR THIS TYPE OF SEEDING.

** FROM NOVEMBER 20 THROUGH MARCH 15, WHEN SOIL CONDITIONS PERMIT, PREPARE THE SEEDBED, LIME AND FERTILIZE, APPLY THE SELECTED SEED MIXTURE, MULCH AND ANCHOR. INCREASE THE SEEDING RATES BY 50% FOR THIS TYPE OF SEEDING.

** APPLY SEED UNIFORMLY WITH A CYCLONE SEEDER, DRILL, CULTIPACKER SEEDER, OR HYDRO–SEEDER (SLURRY MAY INCLUDE SEED AND FERTILIZER) ON A FIRM, MOIST SEEDBED.

** WHERE FEASIBLE, EXCEPT WHEN A CULTIPACKER TYPE SEEDER IS USED, THE SEEDBED SHOULD BE FIRMED FOLLOWING SEEDING OPERATIONS WITH A CULTIPACKER, ROLLER, OR LIGHT DRAG. ON SLOPING LAND, SEEDING OPERATIONS SHOULD BE ON THE CONTOUR WHERE FEASIBLE.

MULCHING:

1. MULCH MATERIAL SHALL BE APPLIED IMMEDIATELY AFTER SEEDING. DORMANT SEEDING SHALL BE MULCHED. 100% OF THE GROUND SURFACE SHALL BE COVERED WITH AN APPROVED MATERIAL.
2. MATERIALS

** STRAW: IF STRAW IS USED IT SHALL BE UNROTTED SMALL–GRAIN STRAW APPLIED AT THE RATE OF 2 TONS PER ACRE OR 90 POUNDS (TWO TO THREE BALES) PER 1,000–SQ. FT. THE MULCH SHALL BE SPREAD UNIFORMLY BY HAND OR MECHANICALLY APPLIED SO THE SOIL SURFACE IS COVERED. FOR UNIFORM DISTRIBUTION OF HAND–SPREAD MULCH, DIVIDE AREA INTO APPROXIMATELY 1,000–SQ.–FT. SECTIONS AND SPREAD TWO 45–LB. BALES OF STRAW IN EACH SECTION.

** HYDROSEEDERS: IF WOOD CELLULOSE FIBER IS USED, IT SHALL BE APPLIED AT 2,000 LB./AC. OR 46 LB./1,000 SQ. FT.

** OTHER: OTHER ACCEPTABLE MULCHES INCLUDE ROLLED EROSION CONTROL MATTINGS OR BLANKETS APPLIED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS OR WOOD CHIPS APPLIED AT 6 TONS PER ACRE.

3. STRAW AND MULCH ANCHORING METHODS

STRAW MULCH SHALL BE ANCHORED IMMEDIATELY TO MINIMIZE LOSS BY WIND OR WATER.

** MECHANICAL–A DISK, CRIMPER, OR SIMILAR TYPE TOOL SHALL BE SET STRAIGHT TO PUNCH OR ANCHOR THE MULCH MATERIAL INTO THE SOIL. STRAW MECHANICALLY ANCHORED SHALL NOT BE FINELY CHOPPED BUT, GENERALLY, BE LEFT LONGER THAN 6 INCHES.

** MULCH NETTING–NETTING SHALL BE USED ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS. NETTING MAY BE NECESSARY TO HOLD MULCH IN PLACE IN AREAS OF CONCENTRATED RUNOFF AND ON CRITICAL SLOPES.

** ASPHALT EMULSION–ASPHALT SHALL BE APPLIED AS RECOMMENDED BY THE MANUFACTURE OR AT THE RATE OF 160 GALLONS PER ACRE.

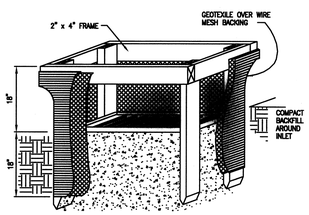
** SYNTHETIC BINDERS–SYNTHETIC BINDERS SUCH AS ACRYLIC DLR (AGRI–TAC), DCA–70, PETROSET, TERRA TACK OR EQUIVALENT MAY BE USED AT RATES SPECIFIED BY THE MANUFACTURER.

** WOOD CELLULOSE FIBER–WOOD CELLULOSE FIBER SHALL BE APPLIED AT A NET DRY WEIGHT OF 750 POUNDS PER ACRE. THE WOOD CELLULOSE FIBER SHALL BE MIXED WITH WATER WITH THE MIXTURE CONTAINING A MAXIMUM OF 50 POUNDS CELLULOSE PER 100 GALLONS OF WATER.

IRRIGATION:

PERMANENT SEEDING SHALL INCLUDE IRRIGATION TO ESTABLISH VEGETATION DURING DRY WEATHER OR ON ADVERSE SITE CONDITIONS, WHICH REQUIRE ADEQUATE MOISTURE FOR SEED GERMINATION AND PLANT GROWTH.

IRRIGATION RATES SHALL BE MONITORED TO PREVENT EROSION AND DAMAGE TO SEEDED AREAS FROM EXCESSIVE RUNOFF.



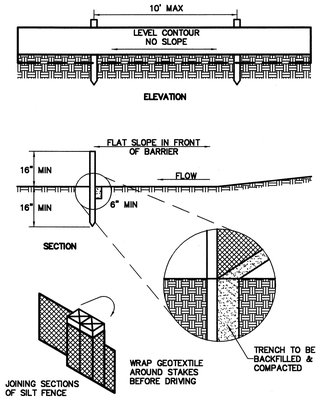
1. INLET PROTECTION SHALL BE CONSTRUCTED EITHER BEFORE UPSLOPE LAND DISTURBANCE BEGINS OR BEFORE THE STORM DRAIN BECOMES OPERATIONAL.
2. THE EARTH AROUND THE INLET SHALL BE EXCAVATED COMPLETELY TO A DEPTH AT LEAST 18 IN.
3. THE WOODEN FRAME SHALL BE CONSTRUCTED OF 2 IN BY 4 IN. CONSTRUCTION GRADE LUMBER. THE 2 IN. BY 4 IN. POSTS SHALL BE DRIVEN 18 IN. INTO THE GROUND AT FOUR CORNERS OF THE INLET AND THE TOP PORTION OF 2 IN. BY 4 IN. FRAME ASSEMBLED USING THE OVERLAP JOINT SHOWN. THE TOP OF THE FRAME SHALL BE AT LEAST 6 IN. BELOW ADJACENT ROADS IF PONDED WATER WOULD POSE A SAFETY HAZARD TO TRAFFIC.
4. WIRE MESH SHALL BE OF SUFFICIENT STRENGTH TO SUPPORT FABRIC WITH WATER FULLY IMPOUNDED AGAINST IT. IT SHALL BE STRETCHED TIGHTLY AROUND THE FRAME AND FASTENED SECURELY TO THE FRAME.
5. GEOTEXTILE SHALL HAVE AN EQUIVALENT OPENING SIZE OF 20 – 40 SIEVE AND BE RESISTANT TO SUNLIGHT. IT SHALL BE STRETCHED TIGHTLY AROUND THE FRAME AND FASTENED SECURELY. IT SHALL EXTEND FROM THE TOP OF THE FRAME TO 18 IN. BELOW THE INLET NOTCH ELEVATION. THE GEOTEXTILE SHALL OVERLAP ACROSS ON SIDE OF THE INLET SO THE ENDS OF THE CLOTH ARE NOT FASTENED TO THE SAME POST.
6. BACKFILL SHALL BE PLACED AROUND THE INLET IN COMPACTED 6 IN. LAYERS UNTIL THE EARTH IS EVEN WITH NOTCH ELEVATION ON ENDS AND TOP ELEVATION ON SIDES.
7. A COMPACTED EARTH DIKE, OR A CHECK DAM SHALL BE CONSTRUCTED IN THE DITCH LINE BELOW THE INLET IF THE INLET IS NOT IN A DEPRESSION AND IF RUNOFF BYPASSING THE INLET WILL NOT FLOW TO A SETTLING POND. THE TOP OF EARTH DIKES SHALL BE AT LEAST 6 IN. HIGHER THAN THE TOP OF THE FRAME.

INLET PROTECTION IN SWALES, DITCH LINES OR YARD INLETS (IP)

N.T.S.

SILT FENCE

N.T.S.



CRITERIA FOR SILT FENCE MATERIALS

1. FENCE POST – THE LENGTH SHALL BE A MINIMUM OF 32 INCHES. WOOD POSTS WILL BE 2–BY–2–IN. NOMINAL DIMENSIONED HARDWOOD OF SOUND QUALITY. THEY SHALL BE FREE OF KNOTS, SPLITS AND OTHER VISIBLE IMPERFECTIONS, THAT WILL WEAKEN THE POSTS. THE MAXIMUM SPACING BETWEEN POSTS SHALL BE 10 FT. POSTS SHALL BE DRIVEN A MINIMUM 16 INCHES INTO THE GROUND, WHERE POSSIBLE. IF NOT POSSIBLE, THE POSTS SHALL BE ADEQUATELY SECURED TO PREVENT OVERTURNING OF THE FENCE DUE TO SEDIMENT/WATER LOADING.
2. SILT FENCE FABRIC – SEE CHART BELOW.

FABRIC PROPERTIES	VALUES	TEST METHOD
MIN TENSILE STRENGTH	120 LBS	ASTM D 4632
MAX. ELONGATION AT 60 LBS	50%	ASTM D 4632
MIN. PUNTURE STRENGTH	50 LBS	ASTM D 4833
MIN. TEAR STRENGTH	40 LBS	ASTM D 4533
APPARENT OPENING SIZE	0.84 MM	ASTM D 4751
MIN. PERMITTIVITY	1X10–2SEC.–1	ASTM D 4491
UV EXPOSURE STRENGTH	70%	ASTM G 4355

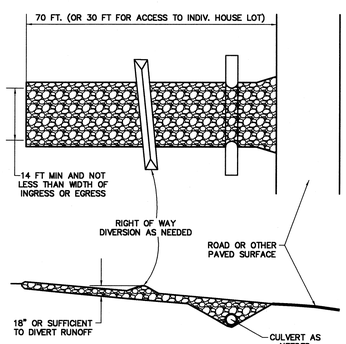
1. SILT FENCE SHALL BE CONSTRUCTED BEFORE UPSLOPE LAND DISTURBANCE BEGINS.
2. ALL SILT FENCE SHALL BE PLACED AS CLOSE TO THE CONTOUR AS POSSIBLE SO THAT WATER WILL NOT CONCENTRATE AT LOW POINTS IN THE FENCE AND SO THAT SMALL SWALES OR DEPRESSIONS THAT MAY CARRY SMALL CONCENTRATED FLOWS TO THE SILT FENCE ARE DISSIPATED ALONG ITS LENGTH.
3. ENDS OF THE SILT FENCES SHALL BE BROUGHT UPSLOPE SLIGHTLY SO THAT WATER PONDED BY THE SILT FENCE WILL BE PREVENTED FROM FLOWING AROUND THE ENDS.
4. SILT FENCE SHALL BE PLACED ON THE FLATTEST AREA AVAILABLE.
5. WHERE POSSIBLE, VEGETATION SHALL BE PRESERVED FOR 5 FEET (OR AS MUCH AS POSSIBLE) UPSLOPE FROM THE SILT FENCE. IF VEGETATION IS REMOVED, IT SHALL BE REESTABLISHED WITHIN 7 DAYS FROM THE INSTALLATION OF THE SILT FENCE.
6. THE HEIGHT OF THE SILT FENCE SHALL BE A MINIMUM OF 16 INCHES ABOVE THE ORIGINAL GROUND SURFACE.
7. THE SILT FENCE SHALL BE PLACED IN AN EXCAVATED OR SLICED TRENCH CUT A MINIMUM OF 6 INCHES DEEP. THE TRENCH SHALL BE MADE WITH A TRENCHER, CABLE LAYING MACHINE, SLICING MACHINE, OR OTHER SUITABLE DEVICE THAT WILL ENSURE AN ADEQUATELY UNIFORM TRENCH DEPTH.
8. THE SILT FENCE SHALL BE PLACED WITH THE STAKES ON THE DOWNSLOPE SIDE OF THE GEOTEXTILE. A MINIMUM OF 8 INCHES OF GEOTEXTILE MUST BE BELOW THE GROUND SURFACE. EXCESS MATERIAL SHALL LAY ON THE BOTTOM OF THE 6–INCH DEEP TRENCH. THE TRENCH SHALL BE BACKFILLED AND COMPACTED ON BOTH SIDES OF THE FABRIC.
9. SEAMS BETWEEN SECTIONS OF SILT FENCE SHALL BE SPLICED TOGETHER ONLY AT A SUPPORT POST WITH A MINIMUM 6–IN. OVERLAP PRIOR TO DRIVING INTO THE GROUND, (SEE DETAILS).
10. MAINTENANCE––SILT FENCE SHALL ALLOW RUNOFF TO PASS ONLY AS DIFFUSE FLOW THROUGH THE GEOTEXTILE. IF RUNOFF OVER\FS20 TOPS THE SILT FENCE, FLOWS UNDER THE FABRIC OR AROUND THE FENCE ENDS, OR IN ANY OTHER WAY ALLOWS A CONCENTRATED FLOW DISCHARGE, ONE OF THE FOLLOWING SHALL BE PERFORMED, AS APPROPRIATE: 1) THE LAYOUT OF THE SILT FENCE SHALL BE CHANGED, 2) ACCUMULATED SEDIMENT SHALL BE REMOVED, OR 3) OTHER PRACTICES SHALL BE INSTALLED.

SEDIMENT DEPOSITS SHALL BE ROUTINELY REMOVED WHEN THE DEPOSIT REACHES APPROXIMATELY ONE–HALF OF THE HEIGHT OF THE SILT FENCE.

SILT FENCES SHALL BE INSPECTED AFTER EACH RAINFALL AND AT LEAST DAILY DURING A PROLONGED RAINFALL. THE LOCATION OF EXISTING SILT FENCE SHALL BE REVIEWED DAILY TO ENSURE ITS PROPER LOCATION AND EFFECTIVENESS. IF DAMAGED, THE SILT FENCE SHALL BE REPAIRED IMMEDIATELY.

CONSTRUCTION ENTRANCE

N.T.S.

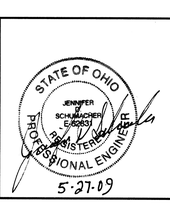


1. STONE SIZE: ODOT # 2 (1.5–2.5 INCH) STONE SHALL BE USED, OR RECYCLED CONCRETE EQUIVALENT.
2. THE CONSTRUCTION ENTRANCE SHALL BE AS LONG AS REQUIRED TO STABILIZE HIGH TRAFFIC AREAS BUT NOT LESS THAN 70 FT. (EXCEPTION: APPLY 30 FT. MINIMUM TO SINGLEMRESIDENCE LOTS).
3. THICKNESS: THE STONE LAYER SHALL BE AT LEAST 6 INCHES THICK FOR LIGHT DUTY ENTRANCES OR AT LEAST 10 INCHES FOR HEAVY DUTY USE.
4. THE ENTRANCE SHALL BE AT LEAST 14 FEET WIDE, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS.
5. GEOTEXTILE: A GEOTEXTILE SHALL BE LAID OVER THE ENTIRE AREA PRIOR TO PLACING STONE. IT SHALL BE COMPOSED OF STRONG ROT–PROOF POLYMERIC FIBERS AND MEET THE FOLLOWING SPECIFICATIONS:

GEOTEXTILE SPECIFICATION FOR CONSTRUCTION ENTRANCE

MINIMUM TENSILE STRENGTH	200 LBS.
MINIMUM PUNCTURE STRENGTH	80 PSI.
MINIMUM TEAR STRENGTH	50 LBS.
MINIMUM BURST STRENGTH	320 PSI.
MINIMUM ELONGATION	20%
EQUIVALENT OPENING SIZE	EOS < 0.6 MM.
PERMITTIVITY	1X10–3 CM/SEC.

6. TIMING: THE CONSTRUCTION ENTRANCE SHALL BE INSTALLED AS SOON AS IS PRACTICABLE BEFORE MAJOR GRADING ACTIVITIES.
7. CULVERT: A PIPE OR CULVERT SHALL BE CONSTRUCTED UNDER THE ENTRANCE IF NEEDED TO PREVENT SURFACE WATER FROM FLOWING ACROSS THE ENTRANCE OR TO PREVENT RUNOFF FROM BEING DIRECTED OUT ONTO PAVED SURFACES.
8. WATER BAR: A WATER BAR SHALL BE CONSTRUCTED AS PART OF THE CONSTRUCTION ENTRANCE IF NEEDED TO PREVENT SURFACE RUNOFF FROM FLOWING THE LENGTH OF THE CONSTRUCTION ENTRANCE AND OUT ONTO PAVED SURFACES.
9. MAINTENANCE: TOP DRESSING OF ADDITIONAL STONE SHALL BE APPLIED AS CONDITIONS DEMAND. MUD SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC ROADS, OR ANY SURFACE WHERE RUNOFF IS NOT CHECKED BY SEDIMENT CONTROLS, SHALL BE REMOVED IMMEDIATELY. REMOVAL SHALL BE ACCOMPLISHED BY SCRAPING OR SWEEPING.
10. CONSTRUCTION ENTRANCES SHALL NOT BE RELIED UPON TO REMOVE MUD FROM VEHICLES AND PREVENT OFF–SITE TRACKING. VEHICLES THAT ENTER AND LEAVE THE CONSTRUCTION–SITE SHALL BE RESTRICTED FROM MUDDY AREAS.
11. REMOVAL: THE ENTRANCE SHALL REMAIN IN PLACE UNTIL THE DISTURBED AREA IS STABILIZED OR REPLACED WITH A PERMANENT ROADWAY OR ENTRANCE.



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STARK COUNTY, OHIO

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