

UTILITY COMPANY UTILITIES

AT&T  
337 N. ABBOTT, RM. 201  
EAST LANSING, MI 48823  
517.337.3660

TELEPHONE

CONSUMERS ENERGY  
530 W. WILLOW ST.  
P.O. BOX 30162  
LANSING, MI 48909  
517.373.6100

GAS  
ELECTRIC

COMCAST  
1070 TROWBRIDGE ROAD  
EAST LANSING, MI 48823  
517.332.1012

CABLE TV

MERIDIAN TOWNSHIP  
5151 MARSH RD.  
OKEMOS, MI 48864  
517.853.4440

WATER MAINS  
SANITARY SEWER  
PATHWAYS

WOLVERINE PIPE LINE  
8105 VALLEYWOOD LANE  
PORTAGE, MI 49024-5251  
231.323.2491

PETROLEUM PIPELINE

INGHAM COUNTY DRAIN  
COMMISSIONER  
707 BUHL ST.  
MASON, MI 48854  
517.676.8395

DRAINS  
STORM SEWER

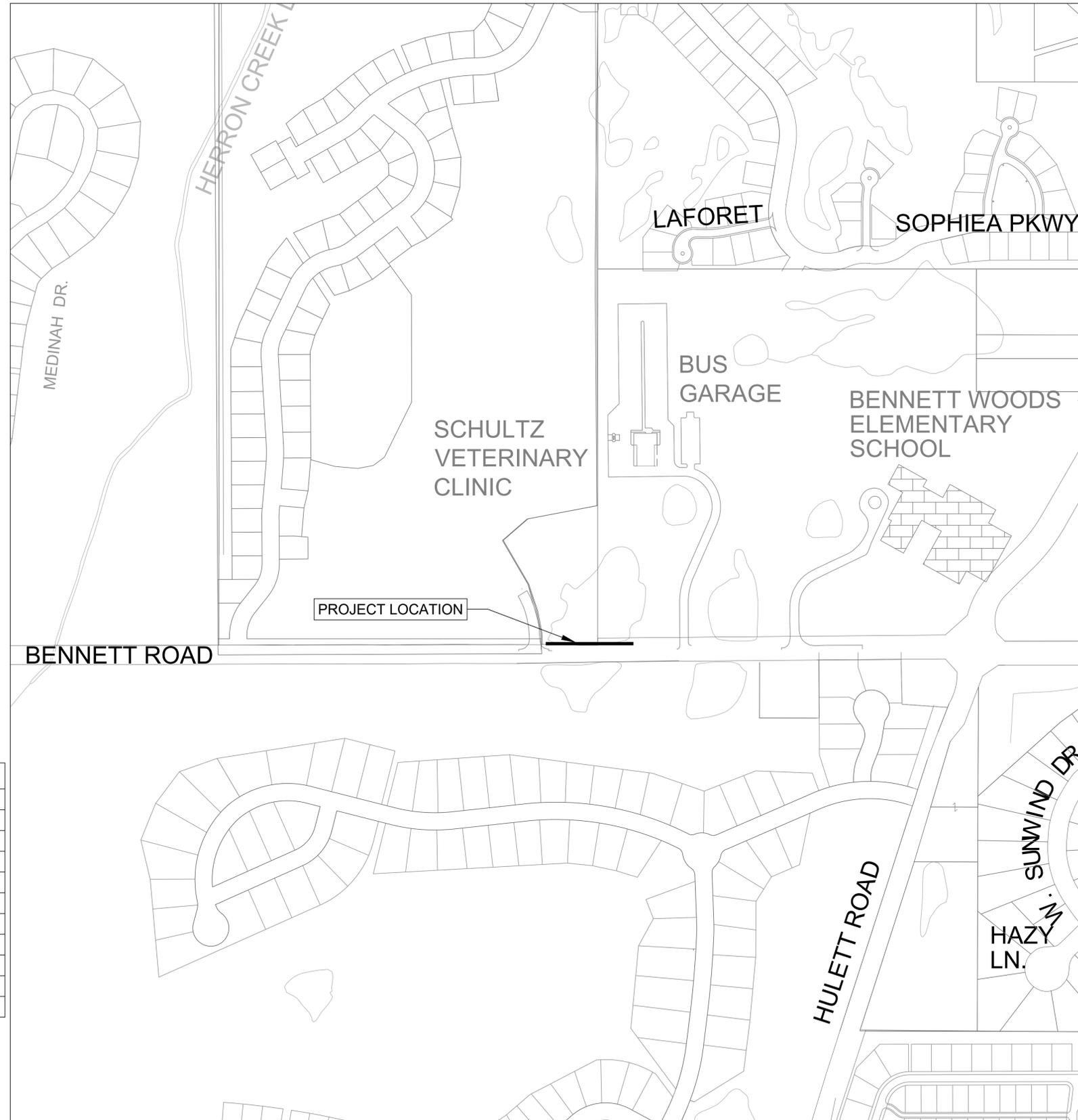
INGHAM COUNTY ROAD DEPT  
301 BUSH ST.  
MASON, MI 48854  
517.676.9722

PUBLIC ROADS AND  
RIGHTS OF WAY

# SCHULTZ PATHWAY CONSTRUCTION PLANS FOR MERIDIAN TOWNSHIP INGHAM COUNTY, MICHIGAN



**Call 811 before you dig.**



**STANDARD CONSTRUCTION NOTES**

1. The Contractor shall notify the Charter Township of Meridian, Department of Public Works, Office of Engineering 517-853-4440 a minimum of 72 hours prior to the start of construction of public utilities or of construction within the public right-of-way.
2. All construction shall conform to the current standards and specifications of the Charter Township of Meridian which are included as part of these plans in effect at the time of construction.
3. After the completion of construction of public utilities or construction within public right-of-way, the contractor must request a final inspection. Any punchlist items resulting from the final inspection must be resolved prior to final release and acceptance.
4. The existing utilities indicated on the plans are in accordance with available information. It shall be the contractor's obligation to verify the exact location of all existing utilities, which might affect this job.
5. The contractor shall notify "MISS DIG" 1-800-482-7171 at least 72 hours prior to the start of construction.
6. The contractor shall at all times be aware of inconvenience caused to the abutting property owners and the general public. Where the contractor does not remedy undue inconveniences, the Charter Township of Meridian, upon four hours notice, reserves the right to perform the work and deduct the cost therefore from the money due the contractor.
7. A Registered Land Surveyor provided by the contractor at the contractor's expense shall replace all property irons and monuments disturbed or destroyed by the contractor's operations.
8. Contractor shall provide Owner and Township Engineer a copy of written permission to use private property for storage of equipment and materials or for his construction operations.
9. Trench backfill under existing or proposed roadways, driveways, and parking areas, shall be sand or gravel, placed in 12" layers (maximum) and consolidated to 95% of maximum density as measured by modified proctor unless otherwise noted.
10. Trees and shrubs are to be protected during construction and bored where necessary.
11. Existing fences shall be removed and restored to their original condition or better where in conflict with construction.
12. Driveways, culverts, ditches, drain tile, tile fields, drainage structures, etc., that are disturbed by the contractor's operations shall be immediately restored.
13. All established lawn areas disturbed by the contractor's operations shall be resodded with matching sod. All other areas shall be seeded and mulched. Seeding and mulching shall be done in accordance with the General Specifications.
14. All ditch slopes shall have established vegetation and be protected from erosion.
15. All utility poles in close proximity to construction shall be supported in a manner satisfactory to the utility owner.
16. Onsite parking and sanitary facilities shall be provided for construction workers. The facilities shall be constructed and operated (with minimal impact to the surrounding area) to the satisfaction of the Township.

**PATHWAY NOTES**

1. Pathways and sidewalks shall be four (4) inch thick concrete except at driveways where they shall be six (6) inch (residential) or seven (7) inch (commercial) thick concrete.
2. Three (3) inches of compacted sand base shall be placed under all pathways and sidewalks.
3. All bituminous aprons shall be two and one-half (2½) inches thick, unless otherwise noted.
4. Property irons shall be maintained by the Contractor.
5. All existing concrete and bituminous to be removed shall be sawcut. All bituminous removal shall be considered incidental to construction.
6. All aggregate base material shall be four (4) inches of 22A.
7. All tree (less than 6") and shrub removal shall be considered part of subgrade preparation.
8. Location of new plant material shall be as directed by the Engineer, and shall be installed in accordance with guidelines established by the A.N.L.A.
9. All plant material not marked for removal shall be protected.
10. Bituminous drives shall be sawcut 18" on either side of proposed pathway.
11. The maximum longitudinal slope is 5% (up to an absolute maximum of 8½% at the direction of the Engineer) and the maximum cross slope is 2%.
13. Expansion joints shall be placed at approximately 100' intervals and shall be ½" thick. Contraction joints shall be sawcut to a depth of ¼ of the depth of the concrete.
14. All lumber to be pressure treated (Osmose 33 or equal) to 0.4 retention.
15. All items not covered under a specific pay item shall be considered incidental.

**Sheet List Table**

Sheet Number	Sheet Title
1	COVER SHEET
2	SESC PLAN
3	SESC NOTES AND DETAILS
4	SESC NOTES AND DETAILS
5	GRADING PLAN
6	SITE PLAN
7	TYPICAL DETAILS
8	BOARDWALK DETAILS
9	BOARDWALK DETAILS
10	TYPICAL SECTIONS



**SEQUENCE OF CONSTRUCTION**

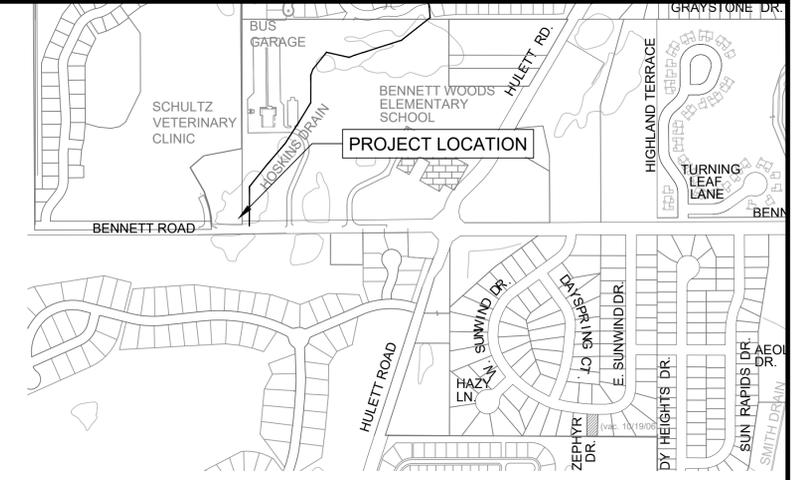
1. INSTALL CONSTRUCTION ENTRANCE, INLET PROTECTION, AND SILT FENCE.
2. CONSTRUCT BOARDWALK BY DRIVING PILES, CONSTRUCTING THE SUPPORT SPAN OF BOARDWALK BETWEEN THE PILES. THE MACHINES USED TO DRIVE THE PILES WILL DRIVE ON THE BOARDWALK SUPPORT IN ORDER TO ENTER THE WETLAND.
3. DEMOLISH THE EXISTING CONCRETE PATHWAY.
4. CONSTRUCT THE PROPOSED CONCRETE PATHWAY
5. PERMANENTLY SEED AREAS ONCE THEY HAVE REACHED FINAL GRADE.
6. REMOVE SESC MEASURES ONCE THE SITE IS FULLY STABILIZED.

**RECOMMENDED CONSTRUCTION SCHEDULING & SEQUENCING**

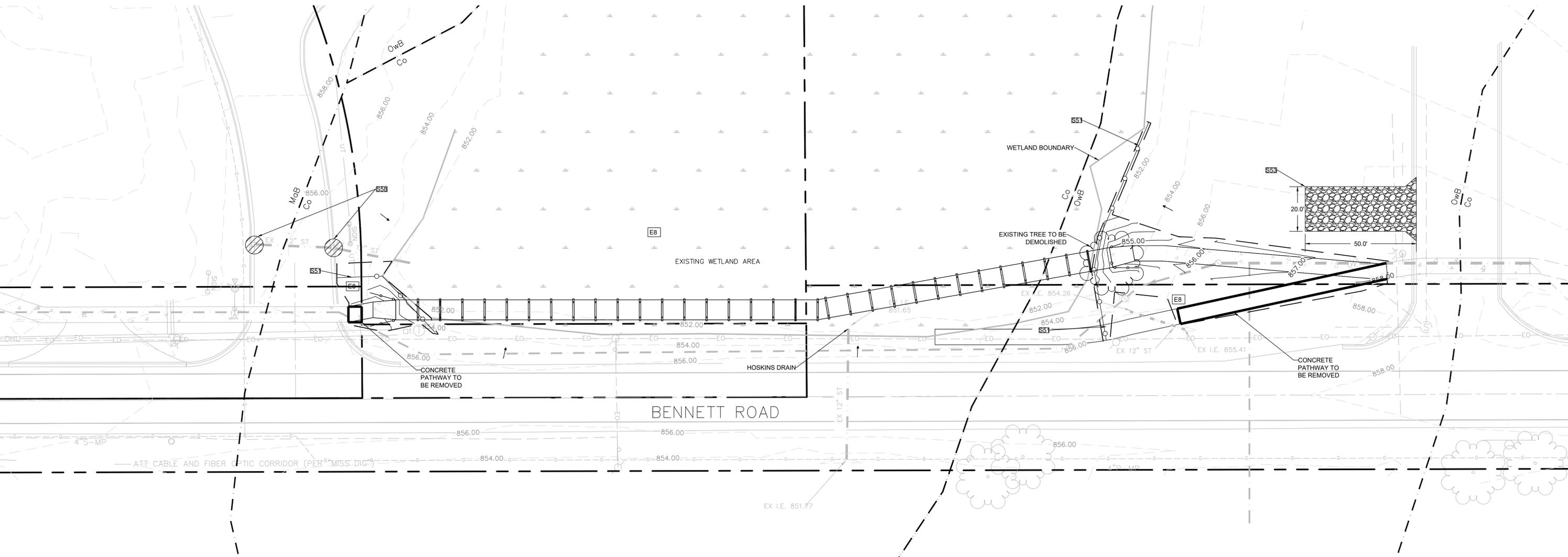
	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	JANUARY	FEBRUARY	MARCH	APRIL	MAY
INSTALL SESC MEASURES												
CONSTRUCT BOARDWALK AND ABUTMENTS												
DEMOLISH EXISTING CONCRETE PATHWAY												
CONSTRUCT CONCRETE PATHWAY												
SITE CLEANUP AND RESTORATION												
REMOVE SESC MEASURES												

**PAY ITEMS (THIS SHEET)**

EROSION CONTROL, GRAVEL ACCESS APPROACH	1	EA
EROSION CONTROL, SILT FENCE	165	FT
EROSION CONTROL, INLET PROTECTION	2	EA
SIDEWALK, REMOVAL	85	SY
TREE REMOVAL, 19 TO 36 INCH	1	EA



THE PROJECT IS LOCATED WITHIN 0' OF THE >1 ACRE WETLAND AND HOSKINS DRAIN.

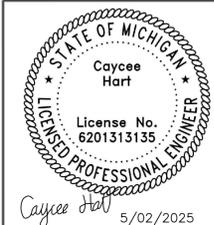
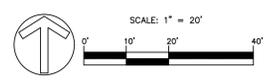


**SOILS:**  
 Co - Colwood-Brookston loams  
 MaB - Marlette Fine Sandy Loam, 2 to 6 percent slopes  
 OwB - Owosso-Marlette Sandy Loams, 2 to 6 percent slopes

**LEGEND**

	PROPERTY LINE
	EXISTING CONTOUR
	PROPOSED CONTOUR
	SILT FENCE
	LIMITS OF DISTURBANCE
	SOIL BOUNDARY
	INLET PROTECTION
	CONSTRUCTION ENTRANCE

KEY	BEST MANAGEMENT PRACTICES	SYMBOL	WHERE USED
<b>SEDIMENT CONTROLS</b>			
S51	SILT FENCE		Use adjacent to critical areas, to prevent sediment laden sheet flow from entering these areas.
S53	STABILIZED CONSTRUCTION ACCESS		Used at every point where construction traffic enters or leaves a construction site.
S58	INLET PROTECTION FABRIC DROP		Use at stormwater inlets, especially at construction sites.
E8	PERMANENT SEEDING		Stabilization method utilized on sites where earth change has been completed (final grading attained).



**Meridian Charter Township**  
 Ingham County, Michigan

**PATHWAY**

**SCHULTZ PATHWAY**  
 SE 1/4 AND SW 1/4 SECTION 29, T4N, R1W, MERIDIAN TOWNSHIP,  
 INGHAM COUNTY, MICHIGAN

DRAWN BY: CH      CHECKED BY: YI

**REVISIONS:**

DATE	BY:	COMMENTS:
11.02.24	CH	EGL 2ND SUBMITTAL
2.20.25	CH	EGL 3RD SUBMITTAL
4.11.25	CH	EGL 4TH SUBMITTAL
5.02.25	CH	BID SET

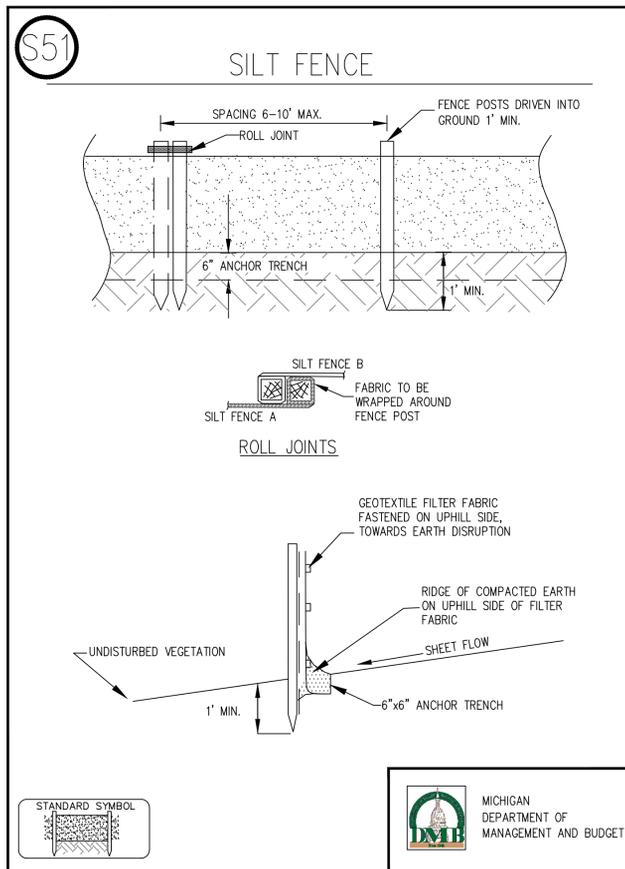
SHEET:

TAX ID: 29-300-014  
 LEGAL DESCRIPTION: M 29-15-3- BEG AT S 1/4 COR SD SEC 29 -W ON S SEC LN 200 FT -N 0 DEG 18'55"W, 60.77 FT -ON CURVE LEFT 174.36 FT HAVING A 333 FT RAD & A CHD OF 172.37 FT. BRG N 15 DEG 18'55"W, -N 30 DEG 18'55"W, 175.77 FT -N 49 DEG 08'47" E, 114 FT -N 79 DEG 14'28"E, 250 FT TO NS 1/4 LN -S 0 DEG 18'55"E, 500 FT ON 1/4 LINE TO POB. SEC 29 T4NR1W 2.73 AC ML

TAX ID: 29-451-002  
 LEGAL DESCRIPTION: COM @ THE S 1/4 COR SEC 29 - N 80 RODS TO N LN OF S 1/2 OF SE 1/4 - E ON N LN 1314.7 FT - S 426.5 FT - E 537.1 FT TO C/L HULETT RD - SWLY ON C/L 1036.22 FT TO S SEC LN - W ON S SEC LN 1324.92 FT TO THE POB. EXC R/W FOR BENNETT & HULETT RD DESC AS COM @ THE S 1/4 COR SEC 29 - N 33 FT TO THE POB. - N 17 FT - N 89 DEG 29'35" E, 1211.32 FT - N 48 DEG 18'54" E, 103.79 FT - ALONG CURVE RT 170 FT HAVING A 314.36 FT RADIUS & A CHD OF 167.94 FT BRG N 29 DEG 40'35" E - N 45 DEG 10' 08" E 125.64 FT - ON CURVE LEFT 140 FT HAVING A 534.53 FT RADIUS & A CHD OF 139.60 FT BRG N 37 DEG 39'56" E - N 30 DEG 09' 44" E, 484.33 FT - N 90 DEG E 30.76 FT - S 30 DEG 25' 06" W 984.28 FT - S 89 DEG 29' 35" W 1322.15 FT TO THE POB SEC 29 T4NR1W 44.26 AC +/-

**SOIL EROSION & SEDIMENTATION CONTROL NOTES**

- All soil erosion and sediment control (SESC) work shall conform to the standards and specifications of the Ingham County Drain Commissioner's Office and Meridian Township.
- Daily inspections shall be made by the contractor for effectiveness of SESC measures. Any necessary repairs shall be performed without delay.
- Erosion of any sediment from work on the site shall be contained on-site and not allowed to collect on any off-site areas or in waterways. Waterways include both natural and man-made open ditches, streams, storm drains, lakes, ponds, and wetlands.
- The Contractor shall apply temporary SESC measures when required and as directed on these plans. The Contractor shall remove temporary measures as soon as permanent stabilization of slopes, ditches, and other changes have been established.
- Staging the work shall be done by the Contractor as directed in these plans and as required to ensure progressive stabilization of disturbed earth.
- Soil erosion control practice shall be established in the early stages of construction by the Contractor. Sedimentation control practices shall be applied as a perimeter defense against any transporting of soil off the site.
- The Contractor shall preserve natural vegetation as much as possible.
- Vegetative stabilization of all disturbed areas shall be established within 15 days of completion of the final grading.



**SILT FENCE SPECIFICATIONS**

**When** • A temporary measure for preventing sediment movement.

**Why** • Used to prevent sediment suspended in runoff from leaving an earth change area.

**Where** • Use adjacent to critical areas, wetlands, base of slopes, and watercourses.

**How**

- Install parallel to a contour.
- The silt fence should be made of woven geotextile fabric.
- Silt fence should accommodate no more than 1/2 to 1 acre of drainage per 100' of fence and on slopes less than 1:2 (v:h).
- Dig a 6" trench along the area where the fence is to be installed.
- Place 6" of the silt fence bottom flap into the trench.
- Backfill the trench with soil and compact the soil on both sides. Create a small ridge on the up-slope side of the fence.
- Install wooden stakes 6 - 10' apart and drive into the ground a minimum of 12".
- Staple the geotextile fabric to the wooden stakes.
- Join sections of silt fence by wrapping ends together (See drawing).

**Maintenance**

- Inspect frequently and immediately after each storm event. Check several times during prolonged storm events. If necessary, repair immediately.
- If the sediment has reached 1/3 the height of the fence, the soil should be removed and disposed of in a stable upland site.
- The fence should be re-installed if water is seeping underneath it or if the fence has become ineffective.
- Silt fence should be removed once vegetation is established and up-slope area has stabilized.

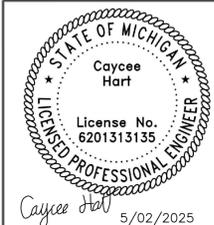
MICHIGAN DEPARTMENT OF MANAGEMENT AND BUDGET logo

**SILT FENCE SPECIFICATIONS**

**Limitations**

- Silt fence may cause temporary ponding and could fail if too much water flows through the area.
- Do not use in areas with concentrated flows.
- Chance of failure increases if fence is installed incorrectly or if sediment accumulation is not removed.

MICHIGAN DEPARTMENT OF MANAGEMENT AND BUDGET logo



**Meridian Charter Township**  
**Ingham County, Michigan**  
**PATHWAY**

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**SCHULTZ PATHWAY**  
 SE 1/4 AND SW 1/4 SECTION 29, T4N, R1W, MERIDIAN TOWNSHIP,  
 INGHAM COUNTY, MICHIGAN

DRAWN BY: GH      CHECKED BY: YI

REVISIONS:		
DATE	BY:	COMMENTS:
11.02.24	CH	EGL 2ND SUBMITTAL
2.20.25	CH	EGL 3RD SUBMITTAL
4.11.25	CH	EGL 4TH SUBMITTAL
5.02.25	CH	BID SET

SHEET: **3 - SESC NOTES AND DETAILS**

**S58** INLET PROTECTION – FABRIC DROP

INLET GRATE

2'-0"

4'-0"

3'-0"

1" REBAR FOR BAG REMOVAL FROM INLET

ISOMETRIC VIEW

INSTALLATION DETAIL

STANDARD SYMBOL

MICHIGAN DEPARTMENT OF MANAGEMENT AND BUDGET

**S58** INLET PROTECTION – FABRIC DROP SPECIFICATIONS

**When**

- When sediment laden stormwater requires treatment before entering a stormwater drainage system.

**Why**

- To prevent sediment from entering stormwater systems.

**Where**

- Use in or at stormwater inlets, especially at construction sites or in streets.

**How**

1. A filter fabric bag is hung inside the inlet, beneath the grate.
2. Replace grate, which will hold bag in place.
3. Anchor filter bag with 1" rebar for removal from inlet.
4. Flaps of bag that extend beyond the bag can be buried in soil in earth areas.

**Maintenance**

- Drop inlet filters should be inspected routinely and after each major rain event.
- Damaged filter bags should be replaced.
- Clean and/or replace filter bag when 1/2 full.
- Replace clogged fabric immediately.
- If needed, initiate repairs immediately upon inspection.
- Remove entire protective mechanism when upgradient areas are stabilized and streets have been swept.

**Limitations**

- Can only accommodate small flow quantities.
- Requires frequent maintenance.
- Ponding may occur around storm drains if filter is clogged.

MICHIGAN DEPARTMENT OF MANAGEMENT AND BUDGET

**E8** PERMANENT SEEDING SPECIFICATIONS

**When**

- To finalize stabilization of temporary seeding areas or when an area needs permanent stabilization following completion of construction. Also used when vegetative establishment can correct existing soil erosion or sedimentation problem.
- Within 5 days of final grade.

**Why**

- To stabilize soil and prevent or reduce soil erosion/sedimentation problems from developing.

**Where**

- Used on construction and earth change sites which require permanent vegetative stabilization.

**How**

1. Review SESC plan and construction phasing to identify areas in need of permanent vegetative stabilization.
2. Select perennial grass and ground cover for permanent cover.
3. Seed mixes vary. However, they should contain native species.
4. Seed mixes should be selected through consultation with a certified seed provider and with consideration of soil type, light, moisture, use applications, and native species content.
5. Soil tests should be performed to determine the nutrient and pH levels in the soil. The pH may need to be adjusted to between 6.5 and 7.0.
6. Prepare a 3–5" deep seedbed, with the top 3–4" consisting of topsoil.
7. Slopes steeper than 1:3 should be roughened.
8. Apply seed as soon as possible after seedbed preparation. Seed may be broadcast by hand, hydroseeding, or by using mechanical drills.
9. Mulch immediately after seeding.
10. Dormant seed mixes are for use after the growing season, using seed which lies dormant in the winter and begins growing as soon as site conditions become favorable.

STANDARD SYMBOL

MICHIGAN DEPARTMENT OF MANAGEMENT AND BUDGET

**E8** PERMANENT SEEDING SPECIFICATIONS

**How (cont.)**

11. Protect seeded areas from pedestrian or vehicular traffic.
12. Divert concentrated flows away from the seeded area until vegetation is established.

**Maintenance**

- Inspect weekly and within 24 hours following each rain event in the first few months following installation to be sure seed has germinated and permanent vegetative cover is being established.
- Add supplemental seed as necessary.

**Limitations**

- Seeds need adequate time to establish.
- May not be appropriate in areas with frequent traffic.
- Seeded areas may require irrigation during dry periods.
- Seeding success is site specific, consider mulching or sodding when necessary.

MICHIGAN DEPARTMENT OF MANAGEMENT AND BUDGET

**E8** PERMANENT SEEDING

Planting Zones:	Lower Peninsula (South of T20N) Zone 1	Lower Peninsula (North of T20N) Zone 2	Upper Peninsula Zone 3
Seeding Window Permanent Seeding	4/15 – 10/10	5/1 – 10/1	5/1 – 9/20
Seeding Window Dormant Seeding*	11/15 – Freeze	11/01 – Freeze	11/01 – Freeze

Source: Adapted from MDOT Interim 2003 Standard Specifications for Construction

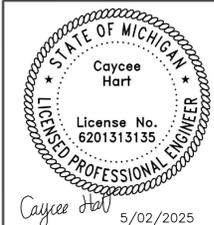
	Zone 1 Lower Peninsula (South of U.S. 10)	Zone 2 Lower Peninsula (North of U.S. 10)	Zone 3 Upper Peninsula
Seeding Dates (with Irrigation or Mulch)	4/1 – 8/1	5/1 – 9/20	5/1 – 9/10
Seeding Dates (w/o Irrigation or Mulch)	4/1 – 5/20 or 8/10 – 10/1	5/1 – 6/10 or 8/1 – 9/20	5/1 – 6/15 or 8/1 – 9/20
Dormant Seeding Dates*	11/1 – Freeze	10/25 – Freeze	10/25 – Freeze

Source: Adapted from USDA NRCS Technical Guide #342 (1999)

\* Dormant seeding is for use in the late fall after the soil temperature remains consistently below 50°F, prior to the ground freezing. This practice is appropriate if construction on a site is completed in the fall but the seed was not planted prior to recommended seeding dates. No seed germination will take place until spring. A cool season annual grass may be added in an attempt to have some fall growth.

- Mulch must be used with dormant seed.
- Do not seed when the ground is frozen or snow covered.
- Do not use a dormant seed mix on grassed waterways.

MICHIGAN DEPARTMENT OF MANAGEMENT AND BUDGET



Meridian Charter Township  
Ingham County, Michigan

**PATHWAY**

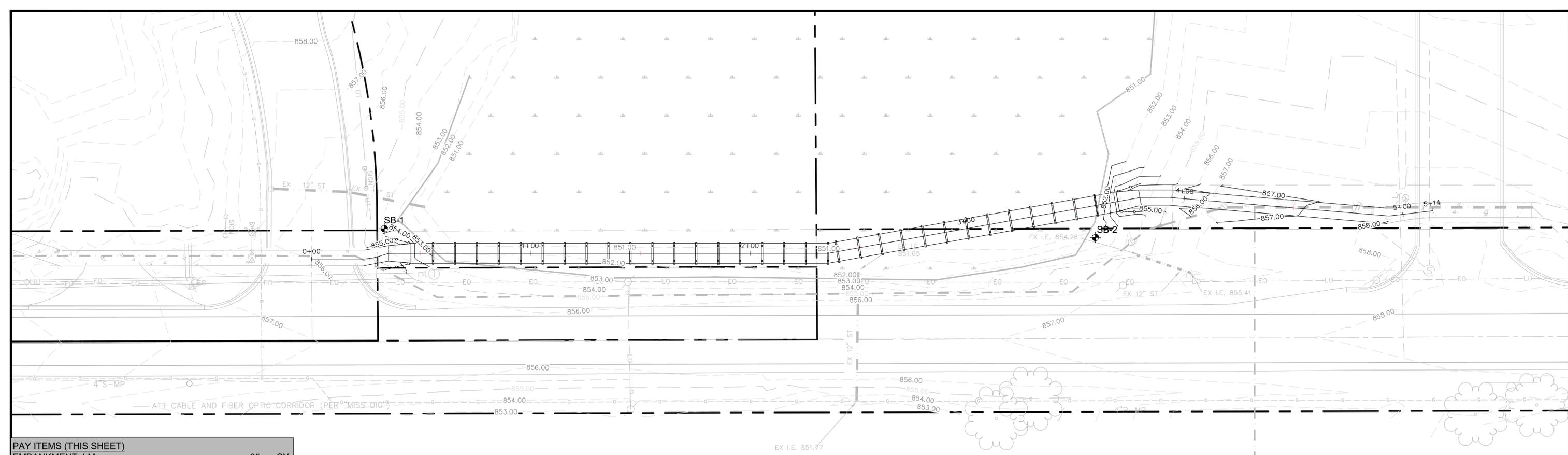
SCHULTZ PATHWAY  
SE 1/4 AND SW 1/4 SECTION 29, T4N, R1W, MERIDIAN TOWNSHIP,  
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DRAWN BY: CH CHECKED BY: YI

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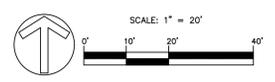
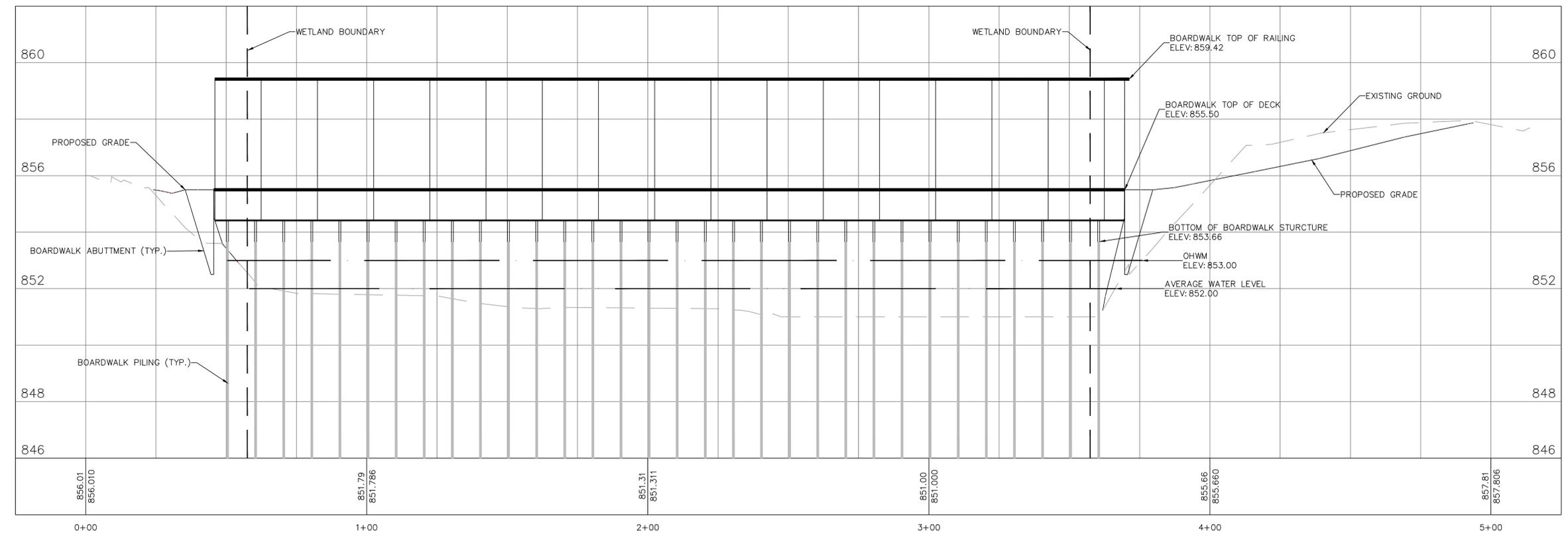
SHEET:

4 - SESC NOTES AND DETAILS



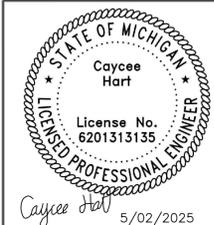
PATHWAY PROFILE

PAY ITEMS (THIS SHEET)		
EMBANKMENT, LM	35	CY
EXCAVATION, EARTH	75	CY
SHARED USE PATH GRADING	140	FT



**Call 811 before you dig.**

WOLVERINE PIPE LINE COMPANY 219-844-9510



Meridian Charter Township  
Ingham County, Michigan  
**PATHWAY**

SCHULTZ PATHWAY  
SE 1/4 AND SW 1/4 SECTION 29, T4N, R1W, MERIDIAN TOWNSHIP,  
INGHAM COUNTY, MICHIGAN

DRAWN BY: CH CHECKED BY: YI

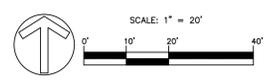
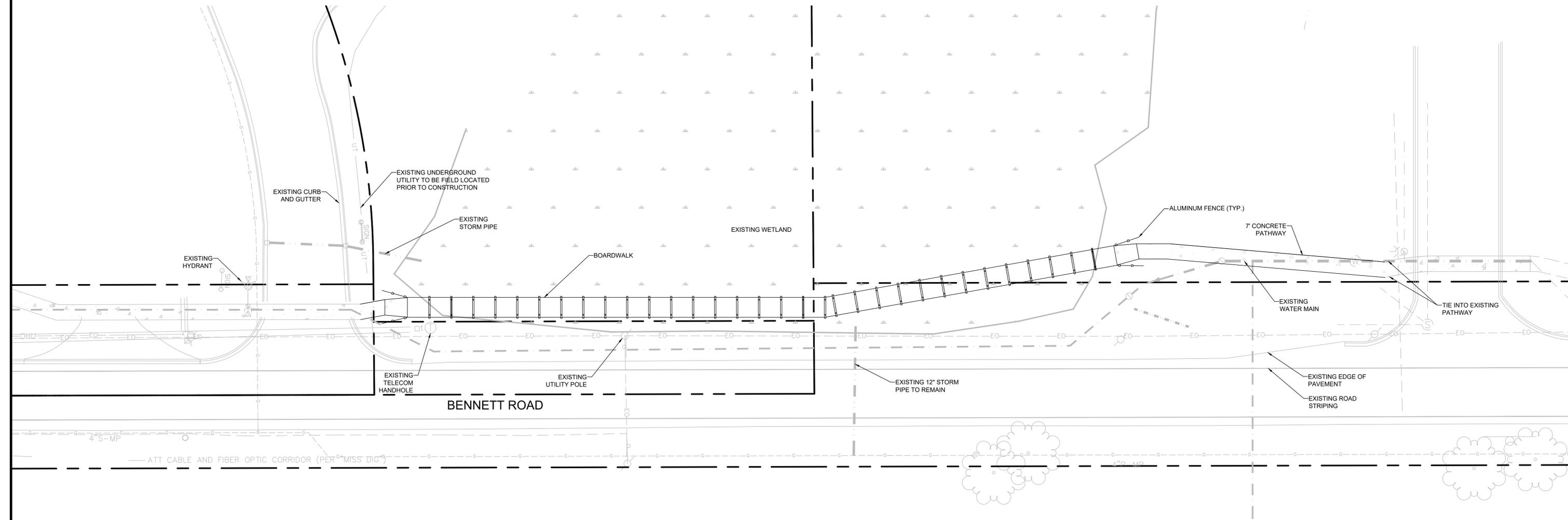
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2.20.25	CH	EGLE 3RD SUBMITTAL
4.11.25	CH	EGLE 4TH SUBMITTAL
5.02.25	CH	BID SET

SHEET:

PAY ITEMS (THIS SHEET)		
SHARED USE PATH, CONCRETE	115	SY
SHARED USE PATH, AGGREGATE	40	TN
CONCRETE ABUTMENT	2	EA
TREATED TIMBER BOARDWALK	335	FT
BOARDWALK STRUCTURAL PILES	1	LS
SITE RESTORATION	1	LS
FENCE, ALUMINUM	50	FT

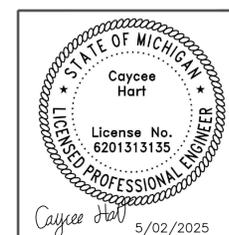
**LEGEND**

- — — — — PROPERTY LINE
- — — — — EXISTING OVERHEAD ELECTRIC LINE
- — — — — EXISTING WATER MAIN



**Call 811 before you dig.**

WOLVERINE PIPE LINE COMPANY 219-844-9510



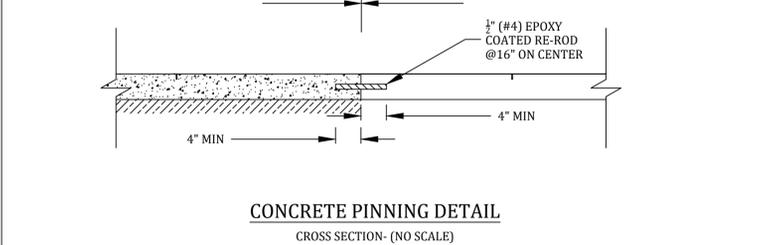
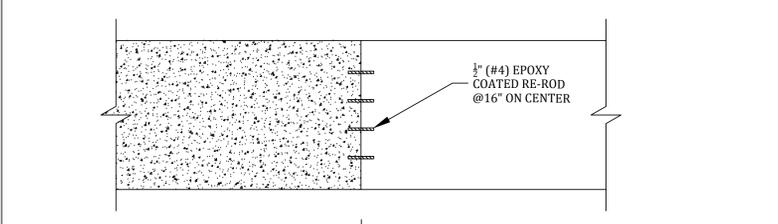
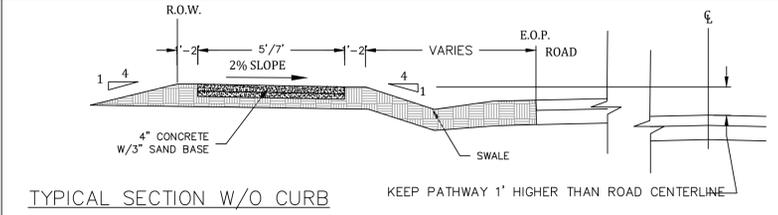
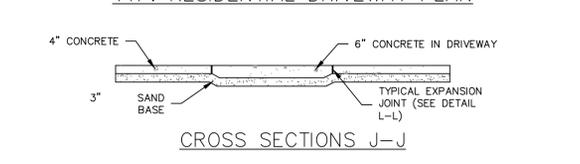
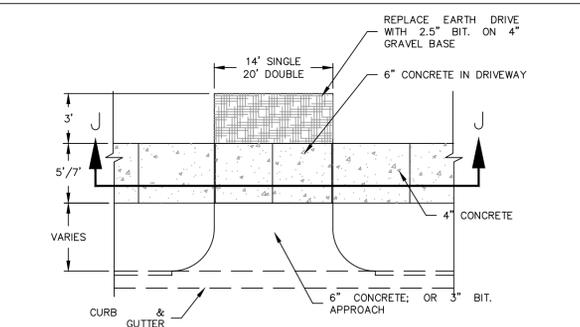
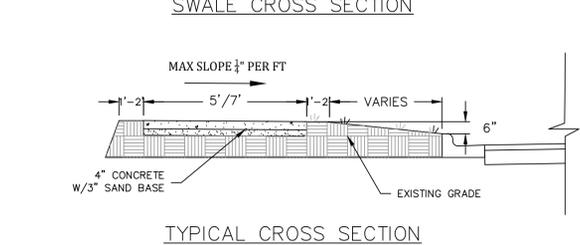
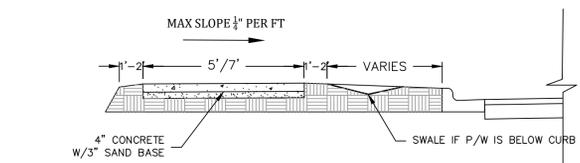
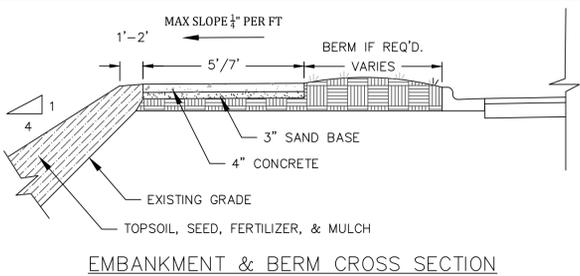
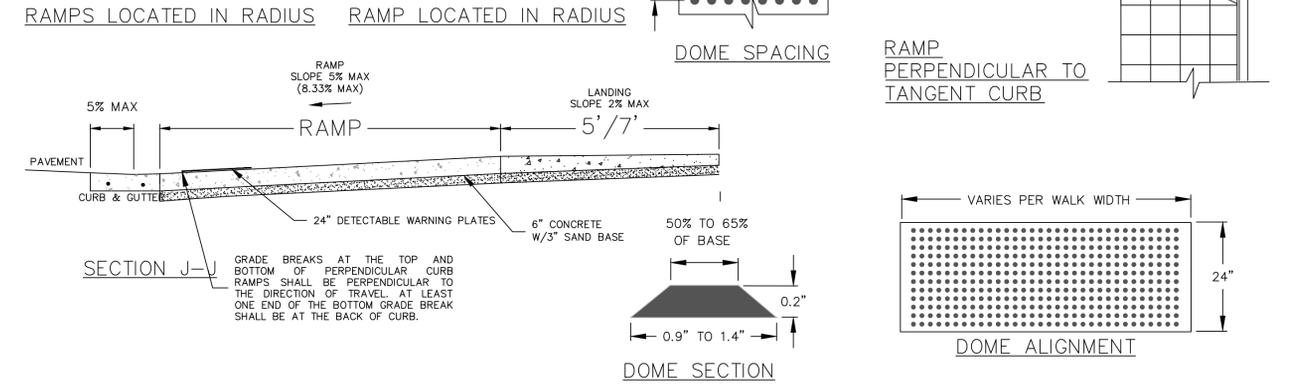
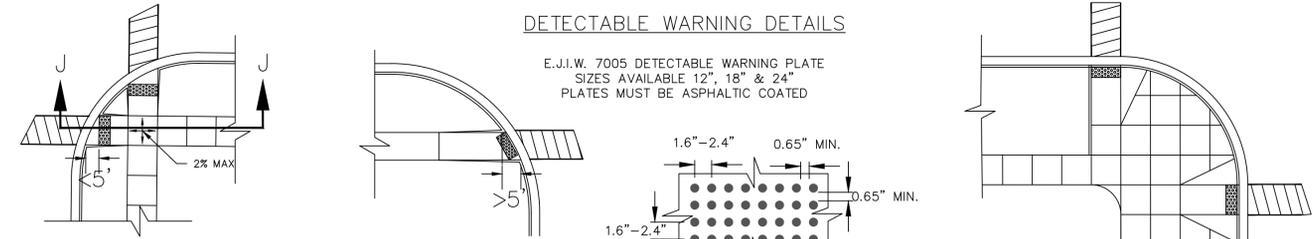
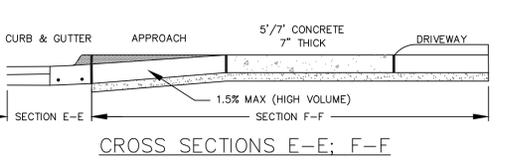
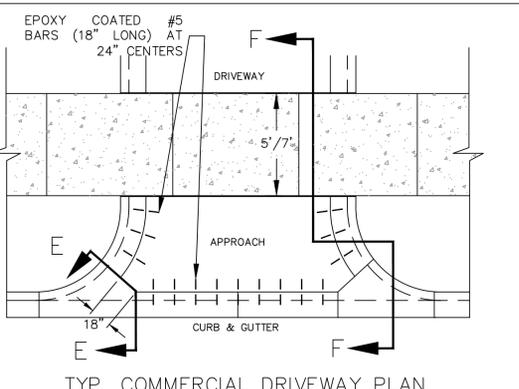
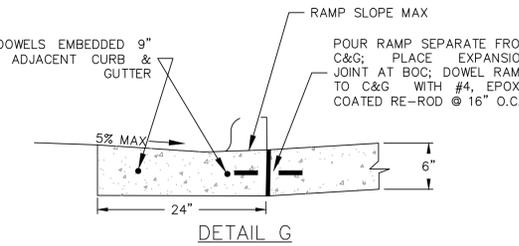
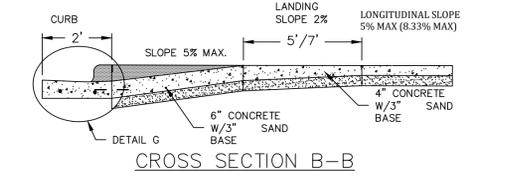
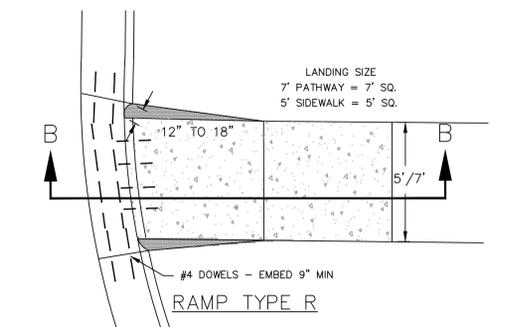
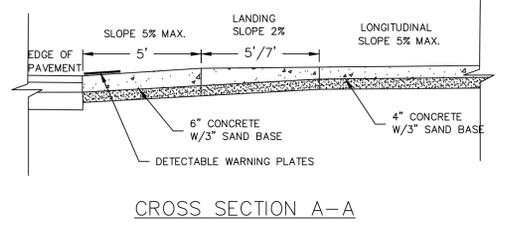
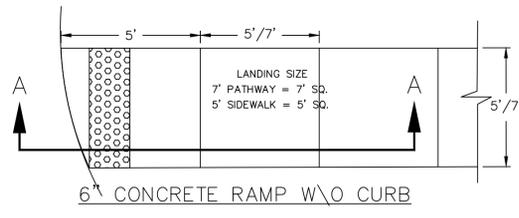
Meridian Charter Township  
Ingham County, Michigan

**PATHWAY**

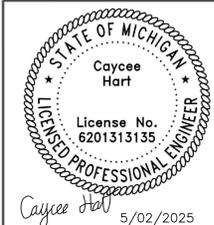
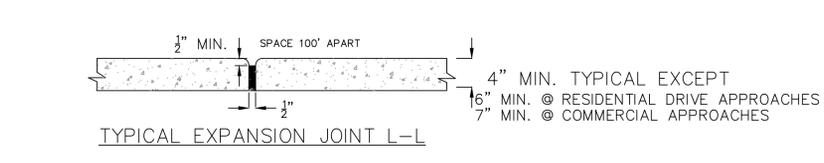
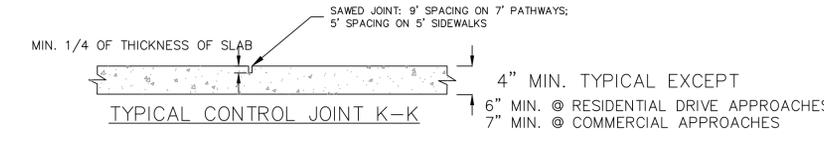
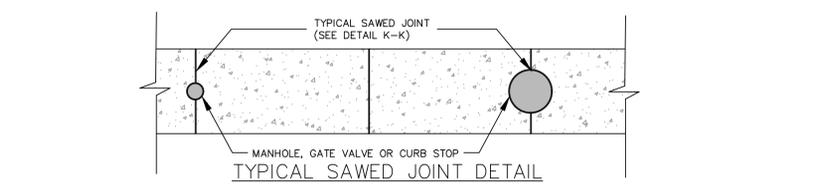
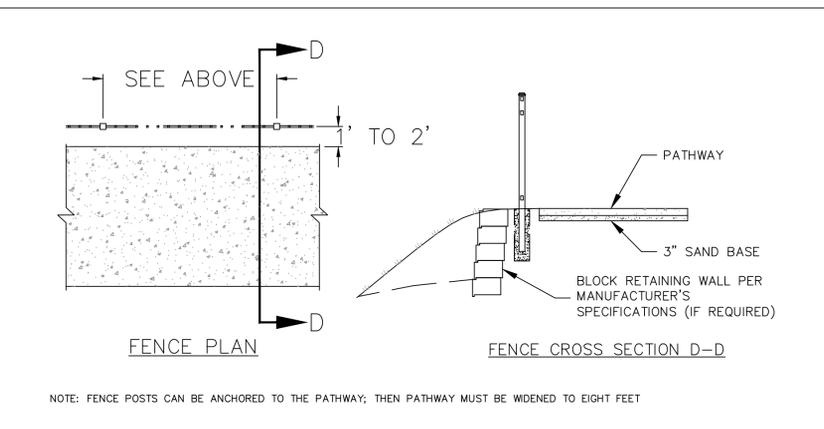
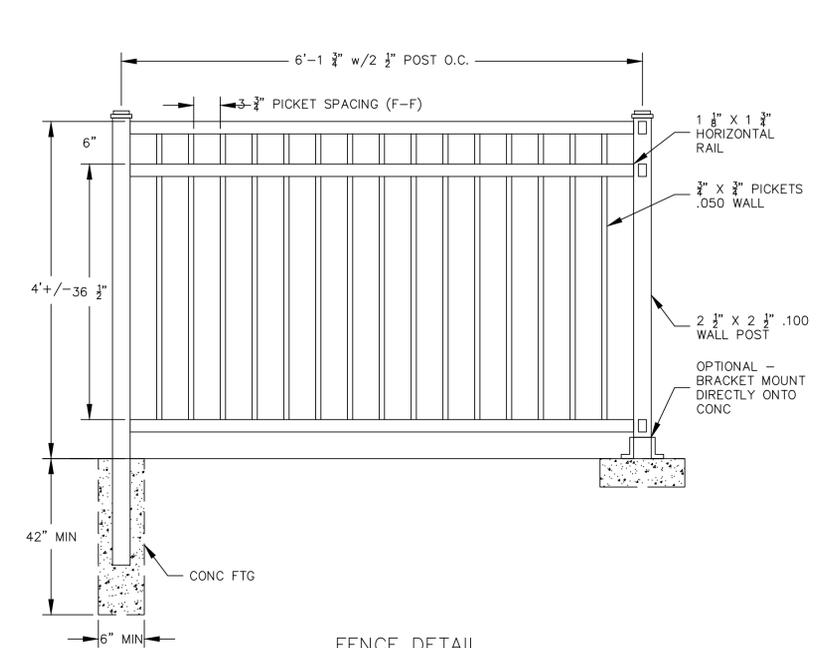
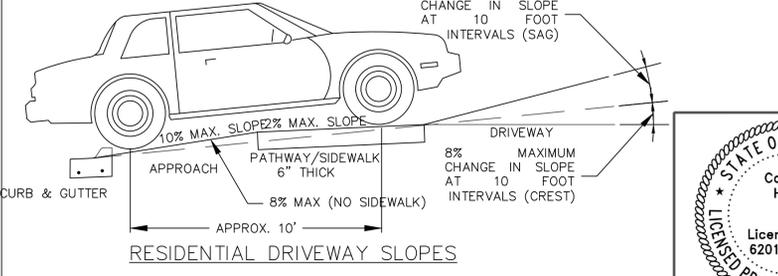
SCHULTZ PATHWAY  
SE 1/4 AND SW 1/4 SECTION 29, T4N, R1W, MERIDIAN TOWNSHIP,  
INGHAM COUNTY, MICHIGAN

DRAWN BY: CH      CHECKED BY: YI

REVISIONS:		
DATE	BY:	COMMENTS:
11.02.24	CH	EGL 2ND SUBMITTAL
2.20.25	CH	EGL 3RD SUBMITTAL
4.11.25	CH	EGL 4TH SUBMITTAL
5.02.25	CH	BID SET
SHEET:		



- GENERAL NOTES
1. SIDEWALKS/PATHWAYS SHALL BE 4" THICK CONCRETE EXCEPT AT DRIVEWAYS.
  2. SIDEWALKS/PATHWAYS THRU DRIVES SHALL BE: 6" (RESIDENTIAL); 7" (MULTI-RESIDENTIAL & COMMERCIAL)
  3. 3" OF COMPACTED SAND BASE SHALL BE PLACED UNDER ALL SIDEWALKS/PATHWAYS.
  4. ALL BITUMINOUS APRONS SHALL BE 2 1/2" THICK, UNLESS NOTED OTHERWISE
  5. PROPERTY IRONS SHALL BE MAINTAINED BY THE CONTRACTOR.
  6. ALL EXISTING CONCRETE AND BITUMINOUS SHALL BE SAWCUT. ALL CONCRETE AND BITUMINOUS REMOVAL SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION.
  7. ALL AGGREGATE BASE SHALL BE 22A, 4" THICK.
  8. ALL TREE AND BUSH REMOVAL SHALL BE CONSIDERED PART OF SUB-GRADE PREPARATION.
  9. LOCATION OF NEW PLANT MATERIAL SHALL BE AS DIRECTED BY THE ENGINEER, AND SHALL BE INSTALLED IN ACCORDANCE WITH GUIDELINES ESTABLISHED BY THE A.A.O.N.
  10. ALL PLANT MATERIAL NOT MARKED FOR REMOVAL SHALL BE PROTECTED.
  11. BITUMINOUS DRIVES SHALL BE SAWCUT 18" ON EITHER SIDE OF PROPOSED PATHWAY.



Meridian Charter Township  
Ingham County, Michigan

**PATHWAY**

SCHULTZ PATHWAY  
SE 1/4 AND SW 1/4 SECTION 29, T4N, R1W, MERIDIAN TOWNSHIP,  
INGHAM COUNTY, MICHIGAN

DRAWN BY: CH CHECKED BY: YI

REVISIONS:		
DATE	BY:	COMMENTS:
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2.20.25	CH	EGLE 3RD SUBMITTAL
4.11.25	CH	EGLE 4TH SUBMITTAL
5.02.25	CH	BID SET

SHEET:

BOARDWALK MATERIALS			EXTREME FIBER BENDING STRENGTH F <sub>b</sub> (PSI)	MODULES OF ELASTICITY E (PSI)
ITEM	DESCRIPTION	SIZE/LENGTH		
1.	8" X 10" BEAMS	9'	2400	1600000
2.	3" X 10" JOISTS	11'	2400	1600000
3.	3" X 10" JOIST SPLICES	18"	2400	1600000
4.	3" X 8" DECK	9'	1500	1800000
5.	4" X 8" RAIL POSTS	4'-6"	1200	1200000
6.	2 X 10 TOP RAILS	11'	1200	1200000
7.	2 X 8 SIDE RAILS	11'	1200	1200000
8.	10" WOOD WOLMANIZED POSTS	5'-7" (VARIES)		
9.	3" X 12" HEADER	9'	2400	1600000
10.	3/8" CARRIAGE BOLTS, NUTS & WASHERS	5-1/2" - 7" (SPUCE PLATES)		
11.	3/4" BOLTS, NUTS & WASHERS	10"		
12.	3/4" BOLTS, NUTS & WASHERS	7-1/2"		
13.	7 GA. GALVANIZED STEEL PLATES	4" X 8"		
14.	5/8" LAG BOLTS	3"		
15.	ICE & WATER CAP	6"		

MATERIALS:

A. WOOD:

All wood members shall be Coast Region Douglas Fir or Southern Yellow Pine species. Commercial grade lumber for beams, joists, blocking and deck panels shall be similar to 2400f-1.6E(MSR). All other members shall be similar to 1200f-1.2E(MSR). All members shall be conditioned and pressure-treated in accordance with the requirements of AWPAC C2. The preservative chemical used shall meet applicable EPA requirements. The use of waterborne chemicals will not be allowed.

Handrails and posts shall be conditioned and pressure-treated with a clean preservative such as pentachlorophenol.

Joists shall extend over the full width of the supporting 8"x10" beams (except side joists).

Deck members shall be continuous over the deck width with no intermediate splices. Deck members shall lay up with no spaces between them. Deck members shall be in full contact with joists below.

Field cutting and drilling of wood members will not be allowed, unless all cuts and field-drilled holes are brush treated with a 5% pentachlorophenol solution or other approved field-treatment. Creosote solutions will not be approved for field-treatment.

All wood members shall have a smooth surface finish.

Wood posts shall meet ASTM D-25 standards for round timber posts. Posts shall be pressure treated in accordance with APWA standard C3.

All wood posts to have a minimum cover of 5'.

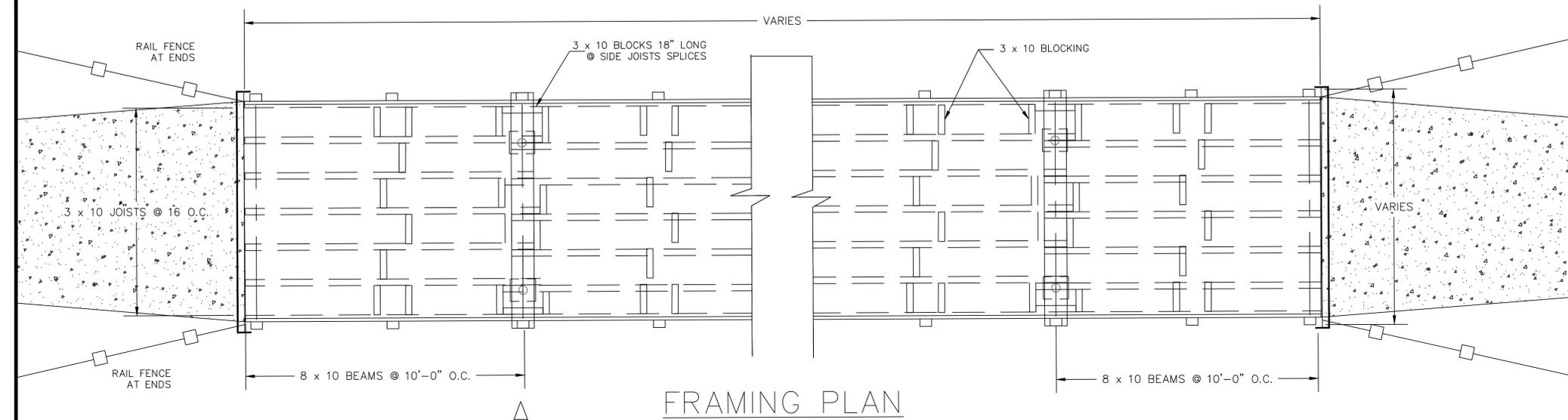
Manufacturer shall submit a certificate attesting to compliance with preservative specifications.

B. HARDWARE:

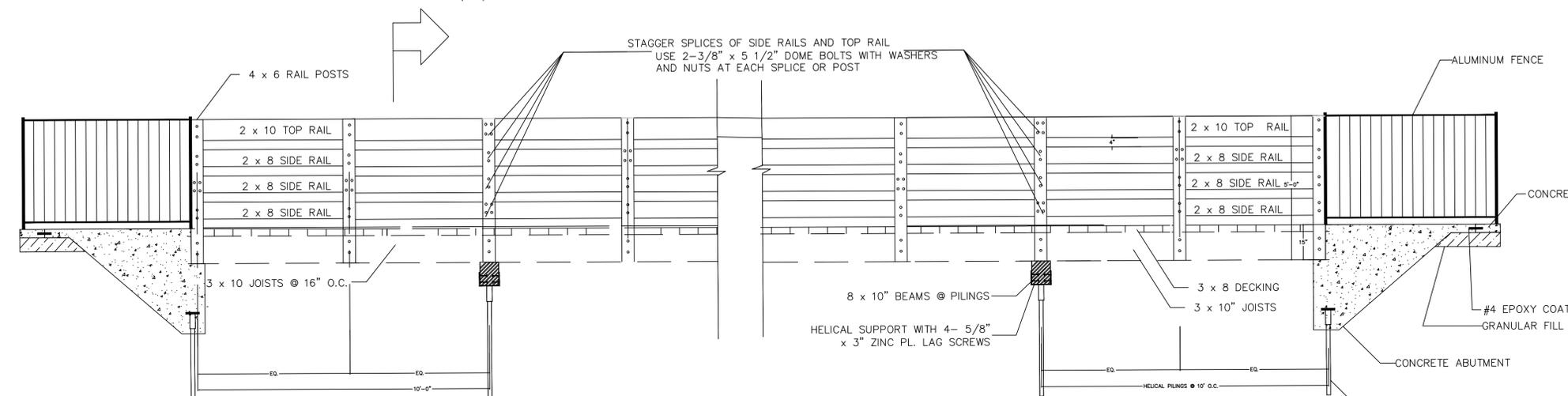
Bolts, nuts, and washers used for assembly shall conform to the requirements of ASTM A 325 and shall be hot-dip galvanized in accordance with ASTM A 153 or stainless steel.

Steel plate brackets used to connect beams to posts shall be ASTM A36 steel with hot-dip galvanized coating conforming to the requirements of ASTM A 153. Dimensions shall be as shown on plan.

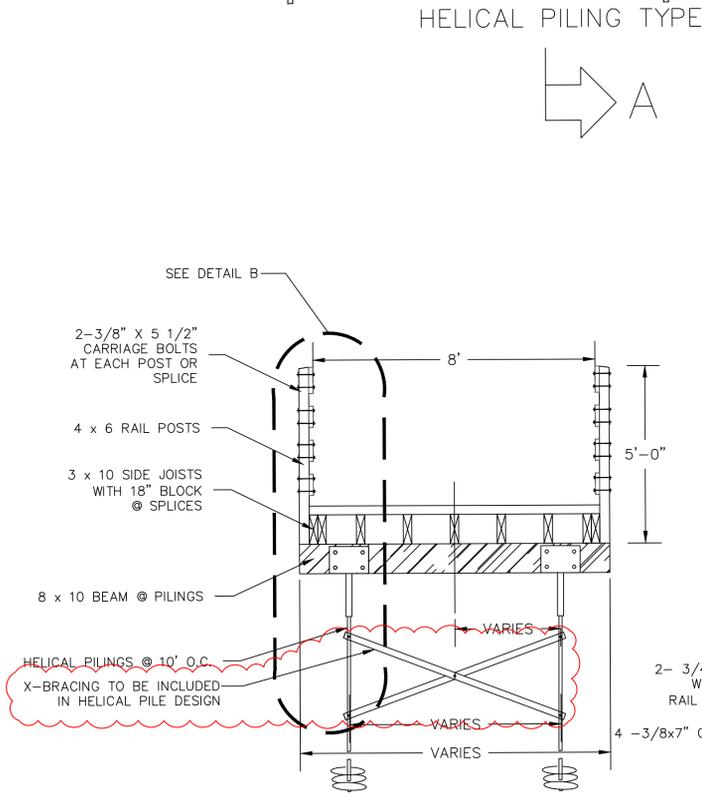
Deck Screws shall be epoxy coated t25 (#10 x 5") coarse thread. Provide two (2) screws per each for the following: joist to beam, joist laps, and blocking. Pre-drill toe-nailed joist to beam members, and deck ends (at side joists) with a 6" ring shank nail, to prevent splitting. Counterset deck screws 1/4", otherwise place as directed.



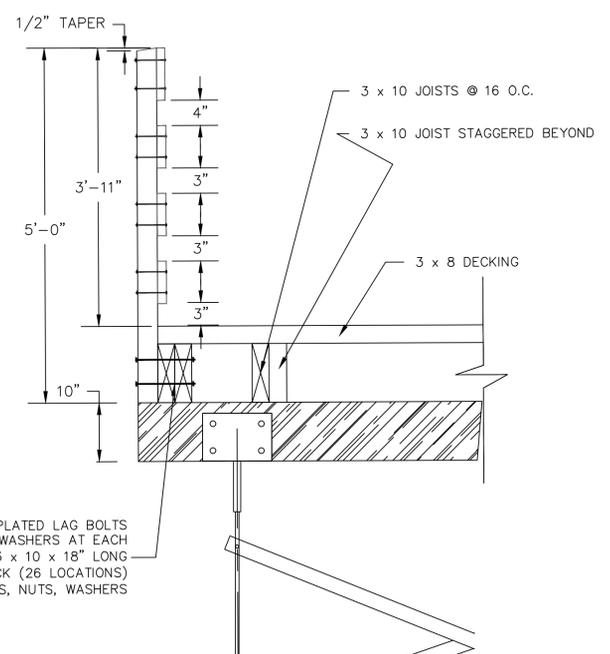
FRAMING PLAN



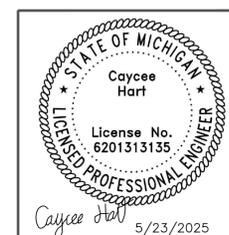
BOARDWALK ELEVATION  
SCALE: 1" = 3'



SECTION A-A



DETAIL B



Meridian Charter Township  
Ingham County, Michigan

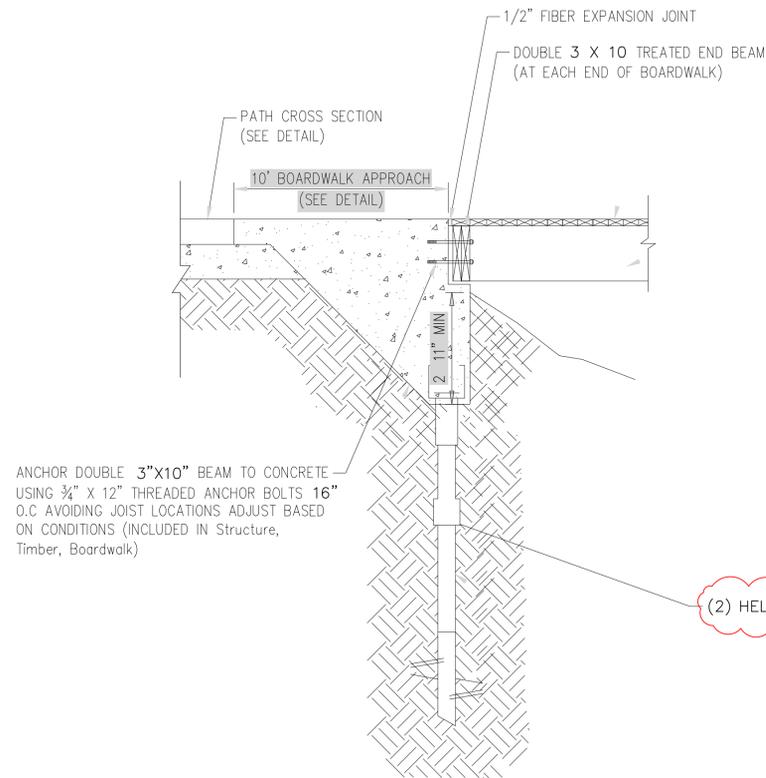
**PATHWAY**

SCHULTZ PATHWAY  
SE 1/4 AND SW 1/4 SECTION 29, T4N, R1W, MERIDIAN TOWNSHIP,  
INGHAM COUNTY, MICHIGAN

DRAWN BY: GH CHECKED BY: YI

REVISIONS:		
DATE	BY:	COMMENTS:
11.02.24	CH	EGLE 2ND SUBMITTAL
2.20.25	CH	EGLE 3RD SUBMITTAL
4.11.25	CH	EGLE 4TH SUBMITTAL
5.02.25	CH	BID SET
5.23.25	CH	BID SET; ADDENDUM #1

SHEET:

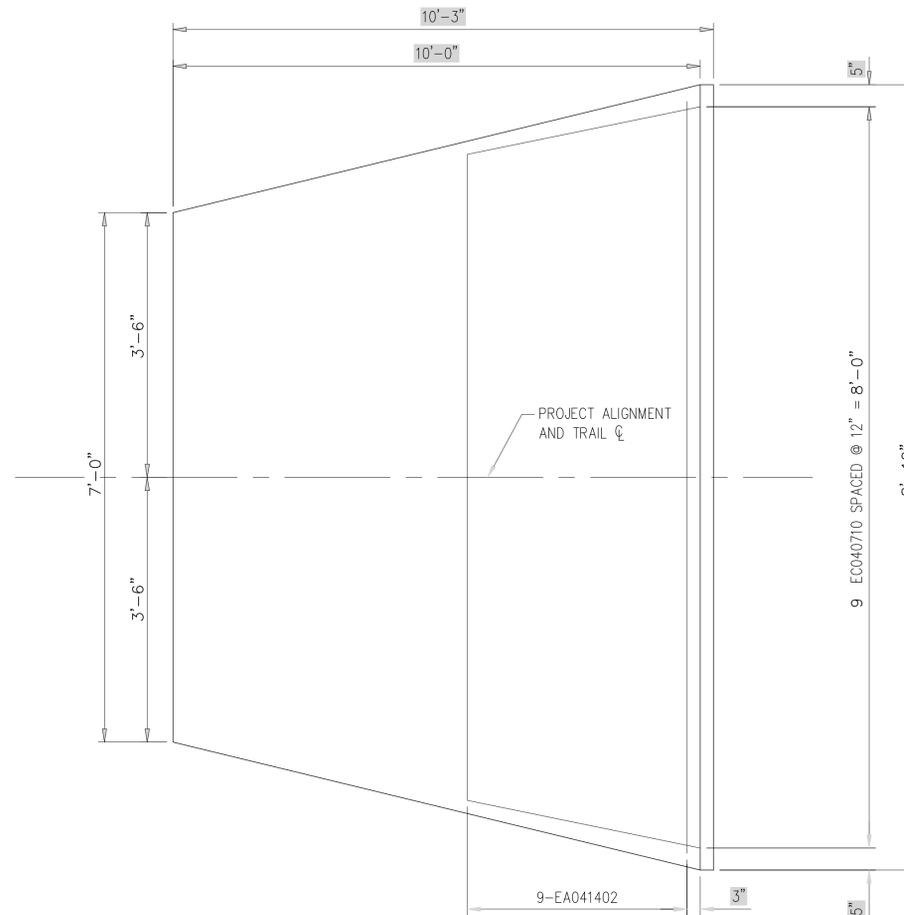


ANCHOR DOUBLE 3"x10" BEAM TO CONCRETE USING 3/4" X 12" THREADED ANCHOR BOLTS 16" O.C AVOIDING JOIST LOCATIONS ADJUST BASED ON CONDITIONS (INCLUDED IN Structure, Timber, Boardwalk)

(2) HELICALS PER ABUTMENT

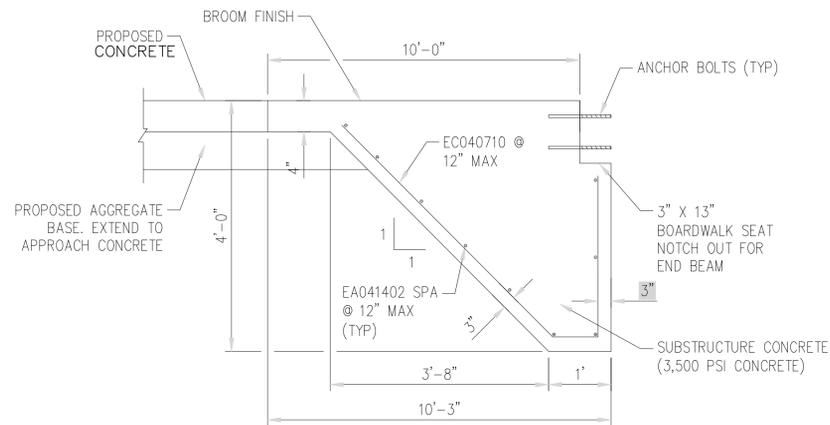
**BEAM/JOIST/POST DETAIL**

NOT TO SCALE



**BOARDWALK APPROACH PLAN**

SCALE: 1/2" = 1'-0"

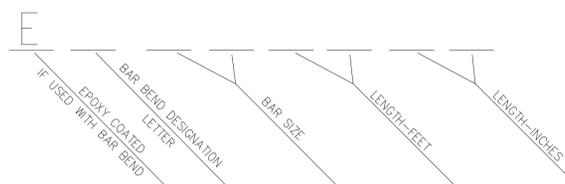


**BOARDWALK APPROACH DETAIL**

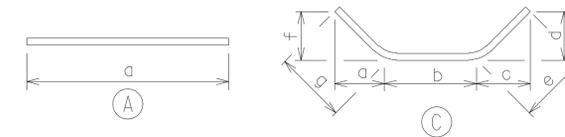
NOT TO SCALE

CUT EA041402 BARS AS REQUIRED.

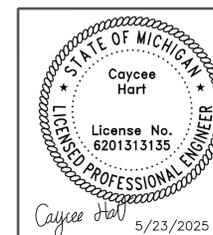
A.S.T.M. STANDARD REINFORCING BARS		
BAR SIZE DESIGNATION	WEIGHT (LBS/FT.)	DIAMETER (INCH)
#2	.167	.250
#3	.376	.375
#4	.668	.500
#5	1.043	.625
#6	1.502	.750
#7	2.044	.875
#8	2.670	1.000
#9	3.400	1.128
#10	4.303	1.270



**STANDARD REINFORCING BAR TYPES**



STEEL REINFORCEMENT										
BAR	DIMENSIONS							SIZE	LENGTH	NO. REQ'D
	a	b	c	d	e	f	g			
SUBSTRUCTURE										
BOARDWALK APPROACHES										
EA041402	8'-2"							4	8'-2"	18
EC040710	3'-5"	8"	0"	2'-4"	2'-4"	3'-5"	4'-10"	4	7'-10"	105



Meridian Charter Township  
Ingham County, Michigan  
**PATHWAY**

**SCHULTZ PATHWAY**

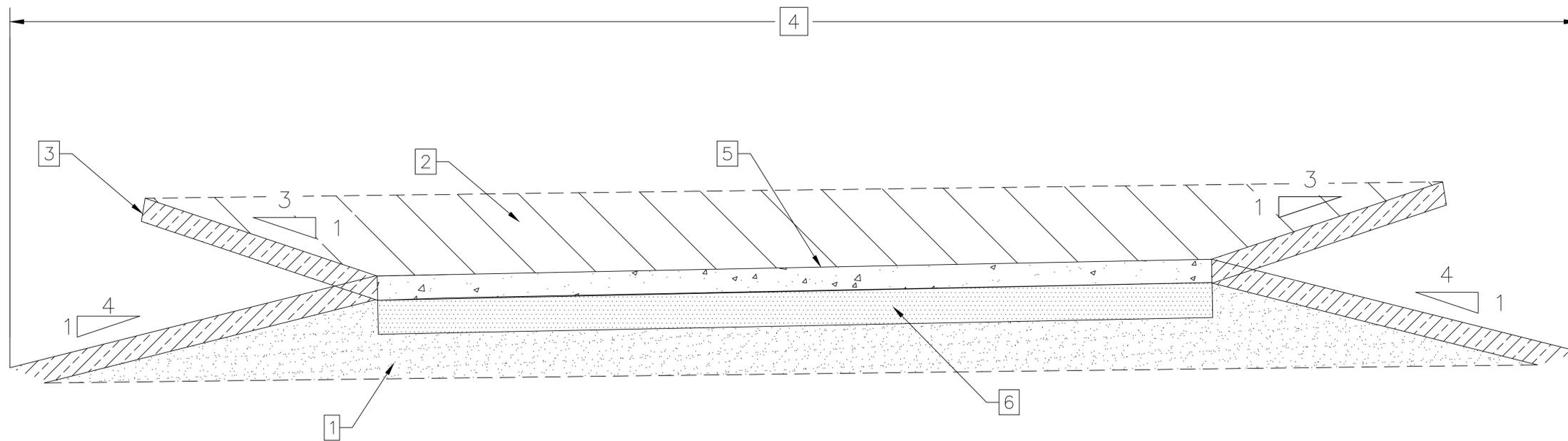
SE 1/4 AND SW 1/4 SECTION 29, T4N, R1W, MERIDIAN TOWNSHIP, INGHAM COUNTY, MICHIGAN

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5.23.25	CH	BID SET; ADDENDUM #1

SHEET:



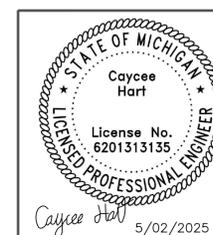
TYPICAL SECTION: CONCRETE PATHWAY

PAY ITEM LEGEND:

- 1 EMBANKMENT, LM
- 2 EXCAVATION, EARTH
- 3 SITE RESTORATION, 3" SCREENED TOPSOIL
- 4 SHARED USE PATH, GRADING
- 5 SHARED USE PATH, 4" CONCRETE
- 6 SHARED USE PATH, AGGREGATE (6" DEPTH)

GENERAL NOTES:

- CROSS-SECTIONS ARE NOT TO SCALE.
- SALVAGE OR REMOVE EXISTING TOPSOIL WITHIN THE GRADING LIMITS, OR AS DIRECTED BY THE ENGINEER. REMOVAL AND DISPOSAL WILL BE PAID FOR AS EXCAVATION, EARTH.
- TOPSOIL FOR SITE RESTORATION MAY BE SALVAGED FROM SITE, BUT MUST BE SCREENED OR RAKED TO REMOVE 1" OR GREATER DEBRIS.
- FOR SITE RESTORATION, USE SEED MEETING MDOT THM MIXTURE.
- EMBANKMENT, LM SHALL BE CLASS II GRANULAR MATERIAL OR ASPHALT MILLINGS.
- FOR EMBANKMENT, LM THE CONTRACTOR MAY USE MILLINGS FROM THE STOCKPILE AT MERIDIAN TOWNSHIP'S SERVICE CENTER. THERE ARE MORE THAN ENOUGH MILLINGS FOR ALL OF THE FILL REQUIRED ON THIS PROJECT. THE CONTRACTOR WILL BE RESPONSIBLE TO PROVIDE THE LABOR AND EQUIPMENT TO LOAD AND TRANSPORT THE MILLINGS FROM THE STOCKPILE LOCATION TO THE CONSTRUCTION SITE.



Meridian Charter Township  
Ingham County, Michigan  
**PATHWAY**

SCHULTZ PATHWAY

SE 1/4 AND SW 1/4 SECTION 29, T4N, R1W, MERIDIAN TOWNSHIP,  
INGHAM COUNTY, MICHIGAN

DRAWN BY: CH

CHECKED BY: YI

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SHEET: