

City of Hilliard, Ohio Divisions of Engineering and Transportation & Mobility Reference Index of Standard Construction Drawings

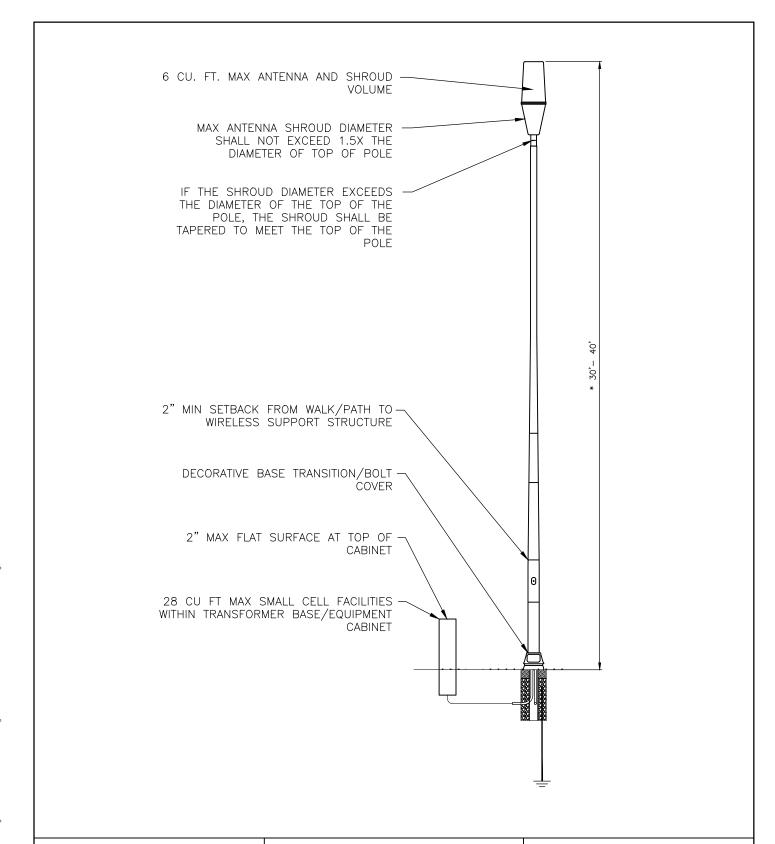
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	5	
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	<i>5</i>	
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TD-1 Trench Dam Detail



APPROVED

Clah Q, Rouseh 6-6-18 CITY ENGINEER DATE

SCALE: NTS

PROPOSED
DISTRIBUTED ANTENNA
SYSTEMS (DAS)

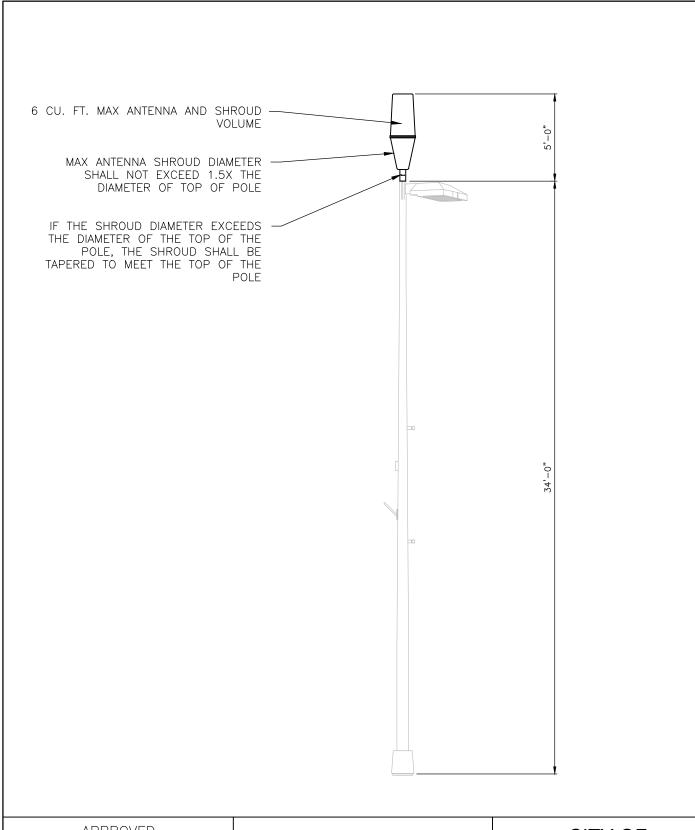
NEW POLE

CITY OF HILLIARD, OHIO

STANDARD

CONSTRUCTION DRAWING

1/1



APPROVED

Clah O. Rouseh 6-6-18 CITY ENGINEER DATE

SCALE: NTS

PROPOSED ANTENNA

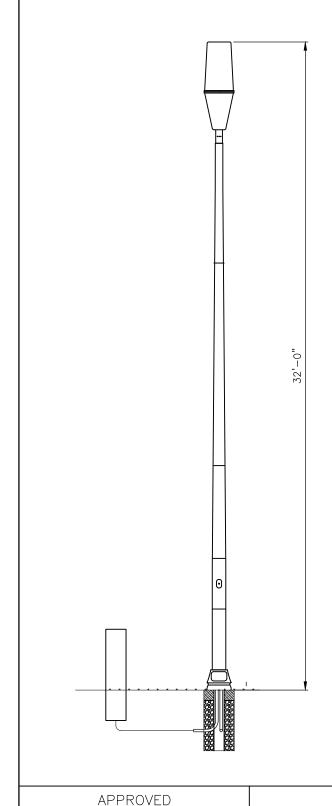
SL-3 THOROUGHFARE STREET POLE, LUMINAIRE

CITY OF HILLIARD, OHIO

STANDARD

CONSTRUCTION DRAWING

1/1



- Existing or proposed A.E.P. Transformer or pedestal. Location of service enclosure and service shall be coordinated with A.E.P. In cases of obstructions or doubt about clearance, location shall be by A.E.P. Engineers.
- 2. Post shall be pressure treated 4"x6" wood, buried a minimum of 3'-0". It shall be set plumb and the bottom 2'-6" of the hole backfilled against undisturbed or compacted earth, with Item 304 compacted in 6" layers. The top 6" of the hole shall be backfilled with compacted earth. City to inspect upon backfill.
- Service enclosure, rainproof, nema 3r, 120/240 volt, 60 amp, 1 phase, 3 wire, 2 breaker with 1-1/2" removable hubs, I-T-E, catalog number W0204 ML 1060-2, or an approved interchangeable equal. Install 20 amp circuit breakers. Furnish 2 pedestal locks, Utilco type PEL 2, or Fargo GM-305, or an approved equal. Face enclosure in direction of street.
- 4. 1-1/2" schedule 40 pvc conduit shall extend 2'-0" minimum below grade and 6" outside of Item 304.
- 5. 5/8"x8' solid copper ground rod, bond to service enclosure with awg #4 bare solid copper conductor.
- 6. Lighting circuit, cu, type use, 600 volt, awg #6 phase, awg #8 neutral.

 Contractor shall bury cable from the service enclosure to A.SEP. Transformer or pedestal and leave 5' minimum leads for connection by A.E.P.
- 7. Buried cable, cu, type THHN, 600 volt, AWG #10 (black, white, green)with ground, encased in 1-1/2" schedule 40 pvc conduit.
- Service enclosure shall be staked for location & grade prior to installation.

. Rousek 6-6-18

DATE

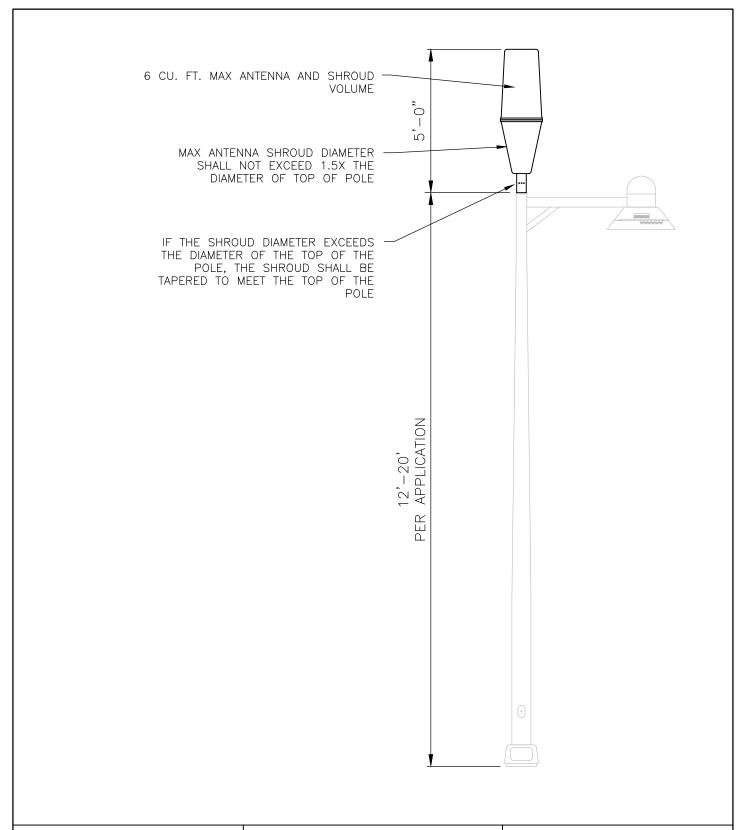
SCALE: NTS

PROPOSED ANTENNA

NEW POLE OLD HILLIARD BUSINESS DISTRICT CITY OF HILLIARD, OHIO

STANDARD
CONSTRUCTION DRAWING

1/1



APPROVED

Clah a, Rouseh 6-6-18 CITY ENGINEER DATE

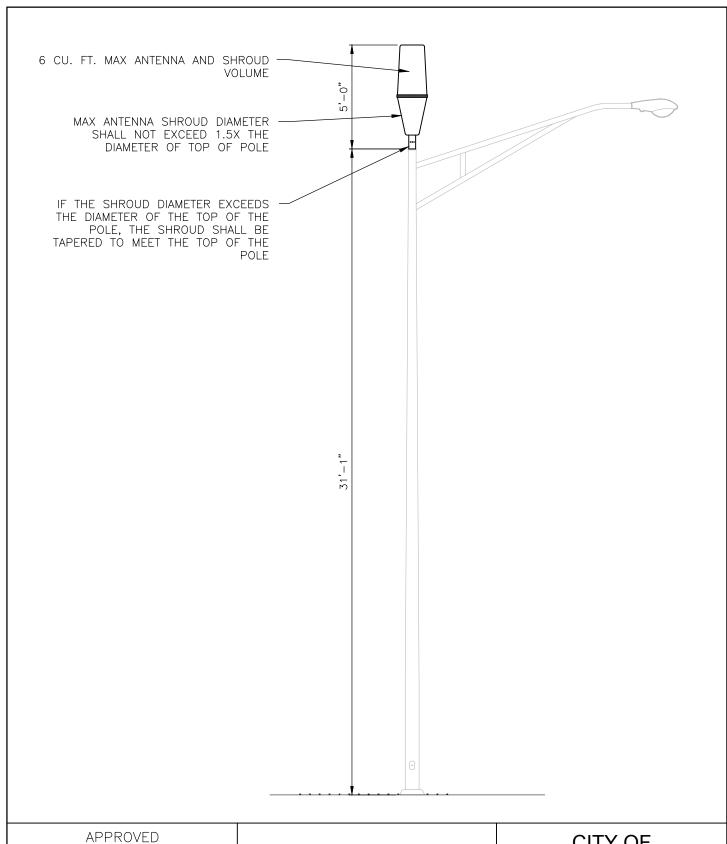
SCALE: NTS

PROPOSED ANTENNA

SL-13 CONSERVATION DISTRICT POLE

CITY OF HILLIARD, OHIO

STANDARD
CONSTRUCTION DRAWING
1/1 AT-4



Clah a, Rouseh 6-6-18 CITY ENGINEER DATE

SCALE: NTS

PROPOSED ANTENNA

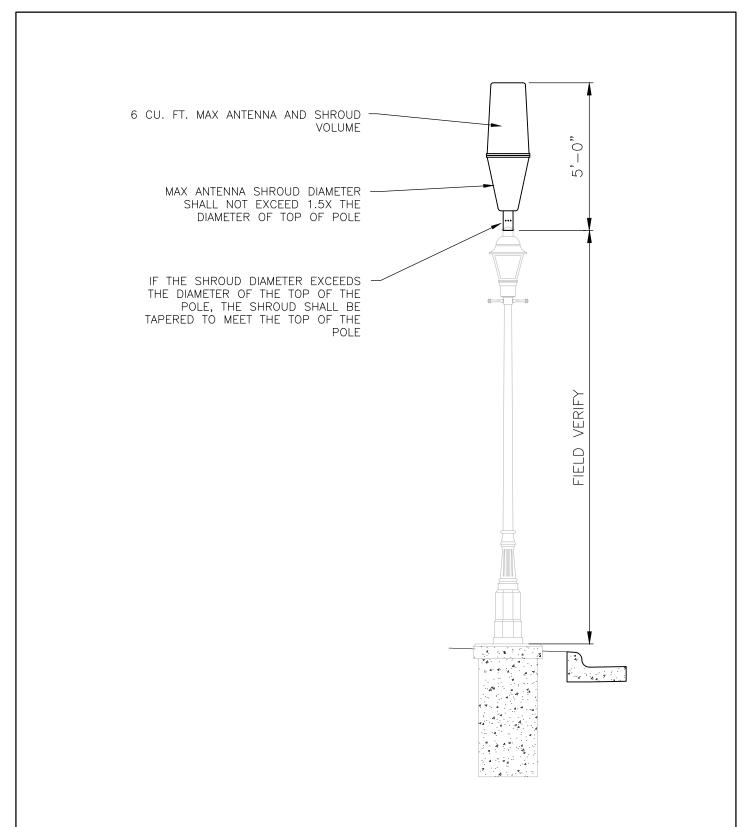
SL-3 THOROUGHFARE STREET POLE, COBRAHEAD

CITY OF HILLIARD, OHIO

STANDARD

CONSTRUCTION DRAWING

1/1



APPROVED

Clah O, Rouseh 6-6-18 CITY ENGINEER DATE

SCALE: NTS

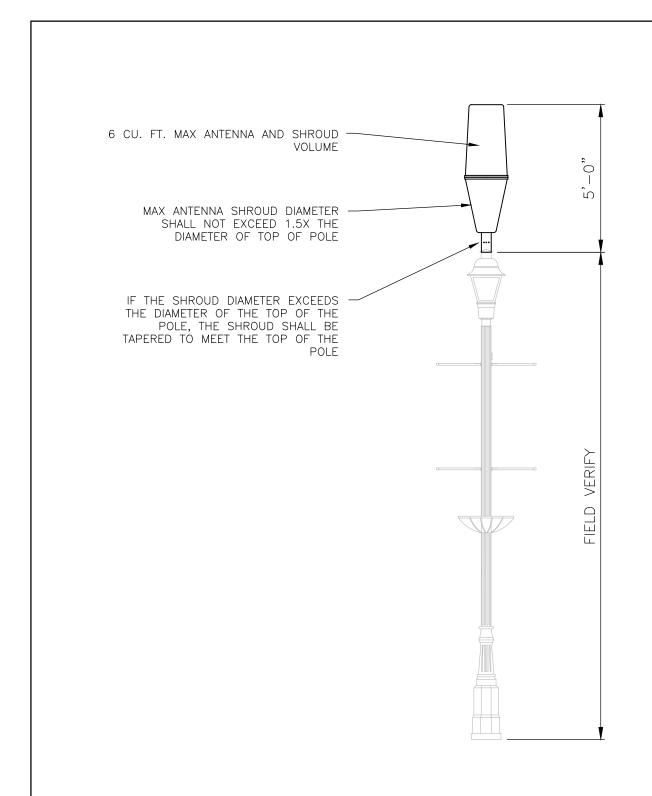
PROPOSED ANTENNA

SL-8 LOCAL STREET
-RESIDENTIAL
-COMMERCIAL/MIXED
STREET BASE, POLE, AND
LUMINAIRE

CITY OF HILLIARD, OHIO

STANDARD CONSTRUCTION DRAWING

1/1 AT-6-SL-8



APPROVED

Clah O, Rouseh 6-6-18 CITY ENGINEER DATE

SCALE: NTS

PROPOSED ANTENNA

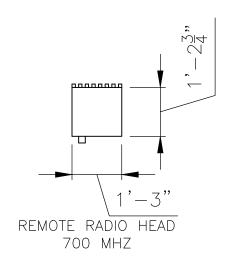
SL-16 OLD HILLIARD STREET BASE, POLE, AND LUMINAIRE

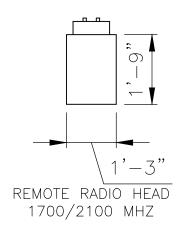
CITY OF HILLIARD, OHIO

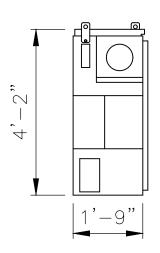
STANDARD

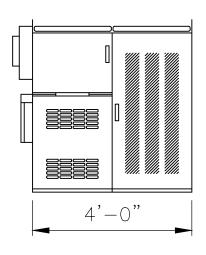
CONSTRUCTION DRAWING

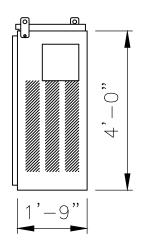
1/1 AT-7-SL-16











CABINET

APPROVED

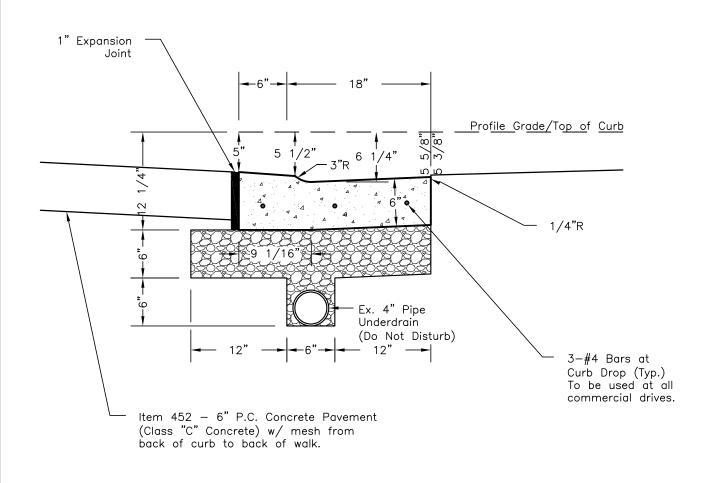
6-6-18 DATE SCALE:

NTS

RADIO HEAD AND CABINET DETAILS

CITY OF HILLIARD, OHIO

STANDARD CONSTRUCTION DRAWING 1/1 AT-8



APPROVED

CITY ENGINEER DATE

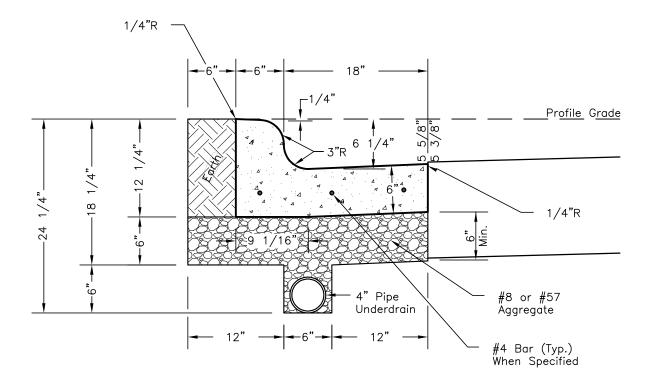
SCALE: 1" = 1'

CURB DETAIL
DROP CURB AT
DRIVE ENTRANCES

CITY OF HILLIARD, OHIO

STANDARD
CONSTRUCTION DRAWING
1/1 CD-1

- 1. Concrete shall be per Section 499 P.C. Concrete, Class C.
- 2. 1.25 CF of concrete per LF.
- 3. All exposed surfaces of concrete curb & gutter shall have a brush finish.
- 4. When specified, 3-#4 bars spaced at 9" on center shall be used for reinforcement.



Α	Ρ	Ρ	R	O	V	Ε	D

CITY ENGINEER DATE

SCALE: 1" = 1'

ITEM 609
STANDARD 6" CONCRETE
COMBINED CURB &
GUTTER

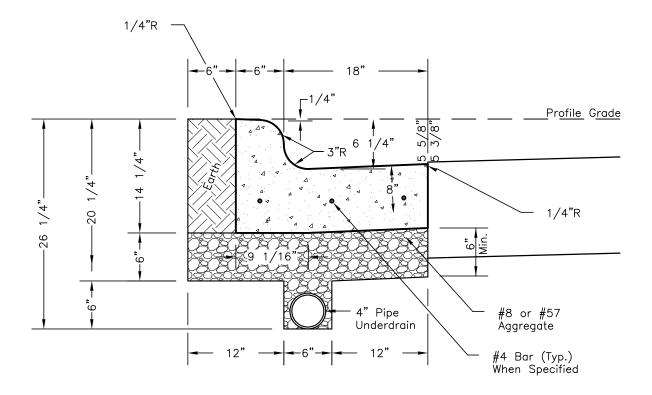
CITY OF HILLIARD, OHIO

STANDARD

CONSTRUCTION DRAWING

1/1 CG-1

- 1. Concrete shall be per Section 499 P.C. Concrete, Class C.
- 2. 1.59 CF of concrete per LF.
- 3. All exposed surfaces of concrete curb & gutter shall have a brush finish.
- 4. When specified, 3-#4 bars spaced at 9" on center shall be used for reinforcement.



APPROVED

CITY ENGINEER DATE

SCALE: 1" = 1'

ITEM 609
SPECIAL 8" CONCRETE
COMBINED CURB &
GUTTER

CITY OF HILLIARD, OHIO

STANDARD
CONSTRUCTION DRAWING

1/1

CG-2

- 1. Precast walls shall have a minimum thickness of 6" and be reinforced sufficiently to permit shipping and handling without damage.
- 2. The inlet bottom shall be shaped to provide slope of 3" to 4" to outlet pipe. The cross sectional form of bottom and longitudinal slope is to be adapted to location of outlet pipe as directed.
- 3. Outlet pipe may be located in front or back and shall be directed towards the center of the inlet.
- 4. The existing gutter within the area around the inlet where cut out, shall be replaced with Class "C" Concrete or Asphalt Concrete Paving as ordered.
- 5. The backfilling within proposed paved areas shall be well tamped in layers not exceeding 4" in thickness, loose measurement, or backfilled with an approved material.
- 6. Walls may be brick, precast solid concrete blocks, or cast in place concrete, Class "C" or precast concrete.
- 7. Place 4" underdrain stubs 30" below top of curb or as directed.
- 8. Maximum pipe diameters are 18" into side walls and 27" into front and back walls for single box inlets.

APPROVED

CITY ENGINEER DATE

SCALE: N/A

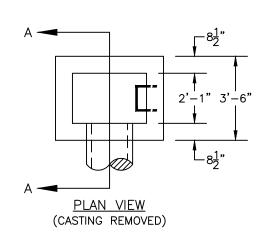
CURB & GUTTER INLET

CITY OF HILLIARD, OHIO

STANDARD CONSTRUCTION DRAWING

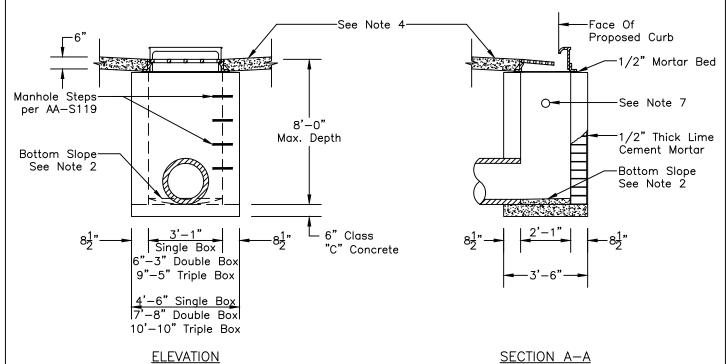
1/2

CI-1



CASTING SPECIFICATIONS				
NEENAH EAST JORD				
Single Box Frame	R-3290	7030		
Double Box Frame	R-3295-A	7031		
Triple Box Frame	R-3295-B	7032		
Grate (Sumps)	TYPE C	TYPE M2		
Vane Grate (Slopes)	TYPE V	TYPE M4		
Driveway Frame & Grate	R-3290-A	7034		

All frames, grates & curb boxes for curb & gutter inlets shall meet the above specifications, or shall be approved equals.



APPROVED	
CITY ENGINEER	DATE
SCALE: 1/4" =	1'

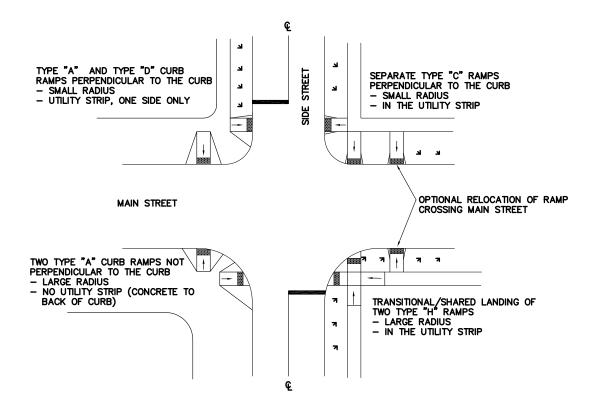
CURB & GUTTER INLET

CITY OF					
HILLIARD, OHIO					
STANDARD					
CONSTRUCTION DRAWING					
2/2		CI-1			

GENERAL NOTES. CURB RAMPS

- 1. CURB RAMP COMPONENTS: THE CURB RAMP INCLUDES THE RAMP PANEL, FLARED SIDES, AND LANDING WHEN NEEDED.
- 2. MATERIAL: THE RAMP PANEL AND FLARED SIDES SHALL BE CONCRETE. THE USE OF BRICK OR PAVERS IS NOT PERMITTED.
- 3. CURB RAMP TYPE: CURB RAMPS SHALL BE SPECIFIED BY THE APPROPRIATE TYPE AND SHALL BE PERPENDICULAR TO THE CENTERLINE OF THE CROSSING STREET
 - TYPE A RAMP WITH LONG FLARES
 - TYPE C RAMP IN UTILITY STRIP
 - TYPE D RAMP OBSTRUCTED ON ONE SIDE
 - TYPE G RAMP WITH RECESSED LOWER LANDING.
 - TYPE H RAMP WITH RECESSED LOWER LANDINGIN A UTILITY STRIP
 - TYPE L MEDIAN RAMP WITH CENTER LANDING
 - TYPE P1 COMBINED PERPENDICULAR AND PARALLEL RAMP
 - TYPE P2 COMBINED PERPENDICULAR AND PARALLEL RAMP IN ONE DIRECTION

NOTE: CITY OF HILLIARD ORDER OF PREFERENCE IS (1) KEEP RAMPS IN LINE WITH APPROACH WALKS AND (2) KEEP RAMPS IN FRONT OF SIDE STREET STOP SIGNS. RAMPS THAT DIRECT PEDESTRIANS INTO THE MIDDLE OF AN INTERSECTION AT AN ANGLE ARE NOT PERMITTED. WHEN RAMPS ARE NOT PERPENDICULAR TO THE CURB, A LANDING RECESSED SHALL BE PROVIDED AT THE BOTTOM OF THE RAMP & THE GRADE BREAK SHALL BE PERPENDICULAR TO THE DIRECTION OF TRAVEL. EXAMPLES OF RECOMMENDED CURB RAMP ALIGNMENTS ARE SHOWN BELOW:



CITY OF

CURB RAMP
GENERAL NOTES

STANDARD
CONSTRUCTION DRAWING

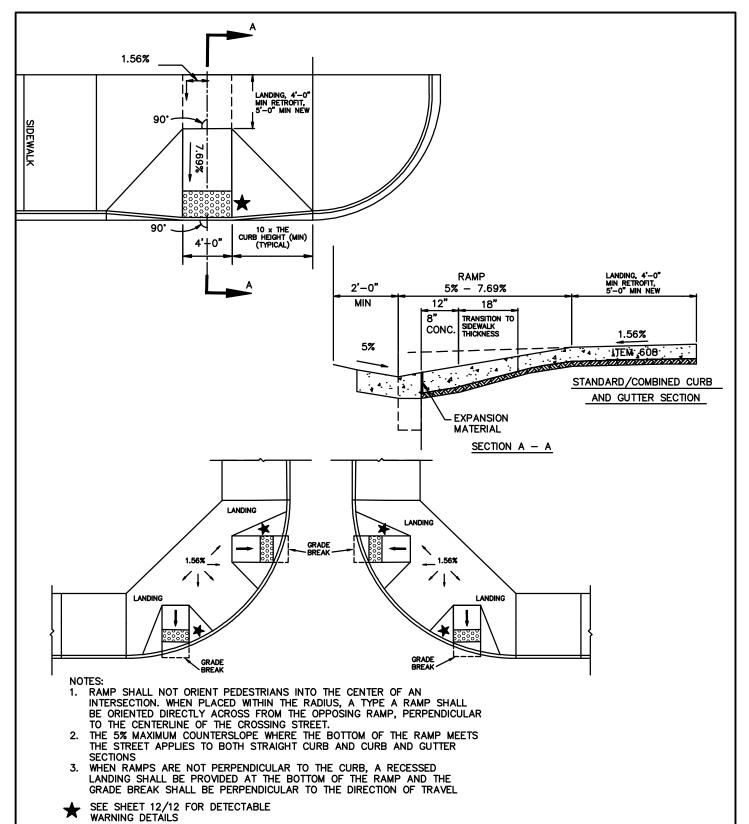
1/12 CR-1

- 4. CURB RAMPS AT ALLEY AND ARTERIAL CROSSINGS SHALL BE 8" THICK CONCRETE
- 5. RAMP RUNNING SLOPE: THE RUNNING SLOPE SHALL BE 5% TO 7.7%. THE RUNNING SLOPE MAY BE INCREASED TO 10 % WITH PRIOR WRITTEN CITY APPROVAL.
- 6. RAMP CROSS SLOPE: THE MAXIMUM CROSS SLOPE SHALL BE 1.56%.
- 7. FOR NEW CONSTRUCTION, MINIMUM RAMP WIDTH AND LANDING SIZE SHALL BE:
 - SIDEWALKS: 5' RAMP AND 5'X5' LANDING
 - MULTI-USE PATHS: 8' RAMP AND 5'X8' LANDING
 - LANDING AT INTERSECTING SIDEWALKS WHEREVER SIDEWALKS INTERSECT, THERE SHALL BE A LANDING MEETING THE ABOVE REQUIREMENTS.
- 10. IN RETROFIT SITUATIONS, THE RAMP WIDTH MAY MATCH THE EXISTING APPROACH SIDEWALK OR MULTI-USE PATH OR 4' MINIMUM, WHICHEVER IS GREATER. THE MINIMUM LANDING SIZE SHALL BE 4' BY THE WIDTH OF THE EXISTING APPROACH WALK OR MULTI-USE PATH.
- 11. ALL JOINTS BETWEEN NEW AND EXISTING MATERIALS SHALL BE FLUSH.
- 12. LONG FLARES: THE LENGTH MEASUREMENT OF THE FLARE AT THE FACE OF CURB SHALL BE A MINIMUM OF 10 TIMES THE CURB HEIGHT
- 13. 1-FT FLARES: THE MEASUREMENT OF THE FLARE AT THE FACE OF CURB SHALL BE A MINIMUM OF 1-FT.
- 14. STREET COUNTER SLOPE: THE COUNTER SLOPE AT THE BASE OF THE RAMP SHALL BE A MAXIMUM OF 5% FOR A MINIMUM OF 2-FT.
- 15. RAMPS AT MARKED AND UNMARKED CROSSINGS: AT MARKED CROSSINGS THE RAMP AND STREET LANDING MUST BE FULLY CONTAINED WITHIN THE MARKED CROSSWALK. AT UNMARKED CROSSINGS THE RAMP AND STREET LANDING MUST BE WITHIN THE PEDESTRIAN RIGHT—OF—WAY AS DEFINED BY CITY CODE.
- 16. SURFACES: RAMP, FLARE, AND LANDING SURFACES MUST BE STABLE AND SLIP RESISTENT. RAMPS SHALL BE MEDIUM BROOMED TRANSVERSE TO THE DIRECTION OF TRAVEL. GRATINGS, VALVE BOXES, AND UTILITY BOXES SHALL NOT BE LOCATED IN THE RAMP, LANDING, OR TRANSITION AREAS.
- 17. OFFSET INTERSECTIONS: AT OFFSET 'T' INTERSECTIONS RAMPS BETWEEN OFFSET STREETS MAY BE DELETED IF THE CENTERLINES OF OFFSET STREETS ARE NO MORE THAN 200-FT APART.
- 18. OPPOSING RAMPS SHALL HAVE A PEDESTRIAN WALKWAY ACROSS THE STREET, ATLEAST 7' WIDE, WITH A CROSS SLOPE (LONGITUDINAL STREET SLOPE) OF NO GREATER THAN 1.56%. VERTICAL CURVES SHALL BE INSTALLED AS NEEDED.
- 19. FOR SIDEWALK OR MULTI-USE PATH CROSSINGS OF PRIVATE DRIVEWAYS:
 - PEDESTRIANS HAVE THE RIGHT OF WAY FOR CROSSINGS OF UNSIGNALIZED PRIVATE DRIVEWAYS (RESIDENTIAL AND COMMERCIAL): THEREFORE, THE SIDEWALK OR PATH SHOULD EXTEND THROUGH THE DRIVEWAY AT GRADE WITH NO CURB RAMP OR DETECTABLE WARNING.
 - IN LOCATIONS WHERE TREE LAWN WIDTHS ARE NARROW MAKING THE DRIVEWAY APPROACH TOO STEEP
 TO PROVIDE A SAFE TRANSITION FOR VEHICLES BETWEEN THE STREET AND DRIVEWAY, THE SIDEWALK OR
 PATH MAY DROP IN ELEVATION 10'-15' ON EITHER SIDE OF THE DRIVEWAY. NO CURB RAMP OR
 DETECTABLE WARNING IS REQUIRED IN THIS CASE. THE MAX CROSS SLOPE SHALL BE 1.56%.
 - AT LARGE COMMERCIAL UNSIGNALIZED DRIVEWAYS, PROVISIONS FOR SIDEWALKS AND PATHS AND THE
 NEED FOR RAMPS AND DETECTABLE WARNINGS SHALL BE EVALUATED ON A CASE—BY—CASE BASIS.
 LARGE COMMERCIAL SIGNALIZED DRIVEWAYS SHALL BE TREATED AS PUBLIC STREET INTERSECTIONS WITH
 - LARGE COMMERCIAL SIGNALIZED DRIVEWAYS SHALL BE TREATED AS PUBLIC STREET INTERSECTIONS WITH RESPECT TO LOCATION AND DESIGN OF ALL SIDEWALKS, MULTI-USE PATHS, CURB RAMPS, AND DETECTABLE WARNINGS.

CURB RAMP
GENERAL NOTES

CURB RAMP
GENERAL NOTES

STANDARD
CONSTRUCTION DRAWING
2/12 CR-1



WARRING DETAILS

CURB RAMP TYPE A

RAMP WITH LONG FLARES

CITY OF HILLIARD, OHIO

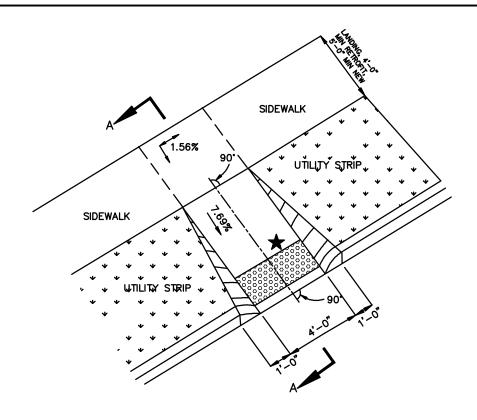
STANDARD
CONSTRUCTION DRAWING

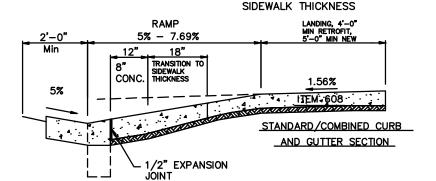
3/12

CR-1

DATE: March 6, 2015

SCALE: NTS





SECTION A - A

NOTES:

- OR IN FRONT OF THE NORMAL STOPPING LOCATION OF VEHICLES AT A STOP OR SIGNAL CONTROLLED INTERSECTION.
 A TYPE H RAMP SHOULD BE USED INSTEAD.
- 2. THE 5% MAXIMUM COUNTERSLOPE WHERE THE BOTTOM OF THE RAMP MEETS THE STREET APPLIES TO BOTH STRAIGHT CURB AND CURB AND GUTTER SECTIONS

SEE SHEET 12/12 FOR DETECTABLE WARNING DETAILS

DATE: March 6, 2015

SCALE: NTS

CURB RAMP TYPE C

PAMP IN UTILITY STRIP

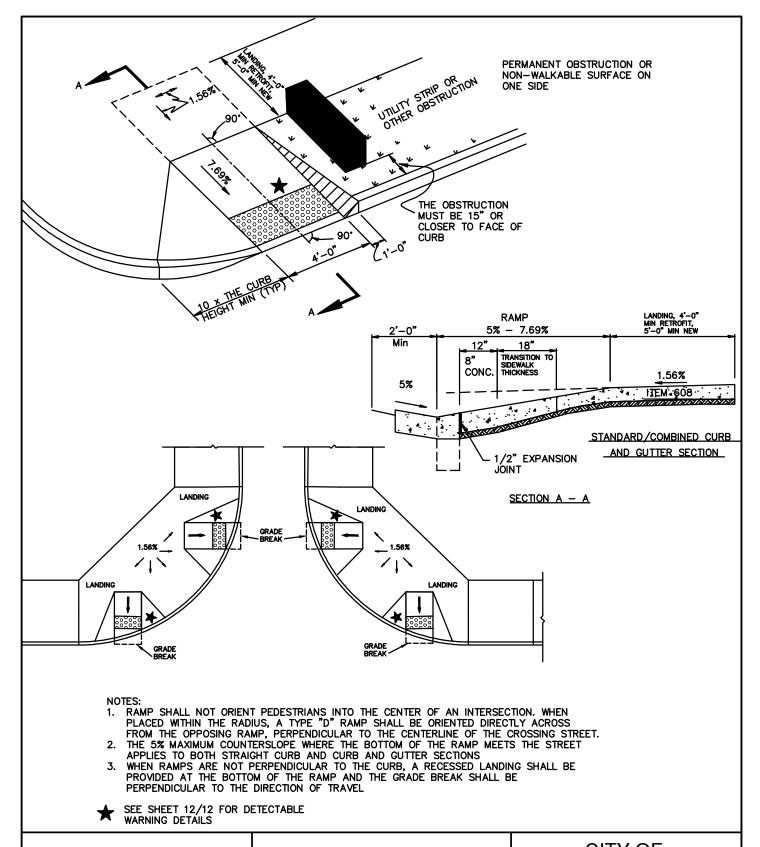
CITYOF

HILLIARD, OHIO

STANDARD

CONSTRUCTION DRAWING

4/12 CR-1



DATE: March 6, 2015

SCALE: NTS

CURB RAMP TYPE D

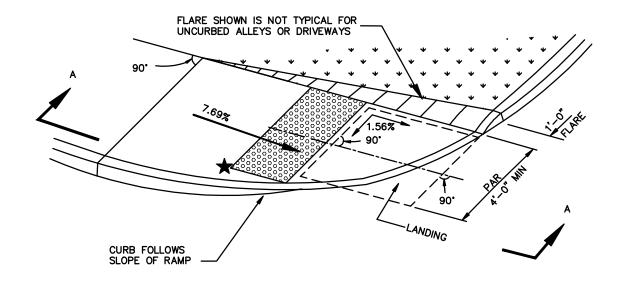
RAMP OBSTRUCTED ON ONE SIDE

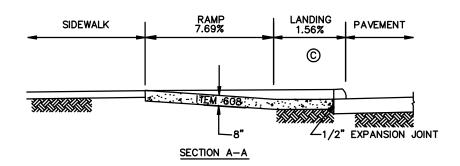
CITY OF HILLIARD, OHIO

STANDARD
CONSTRUCTION DRAWING

5/12

CR-1





SUPPLEMENTAL NOTES

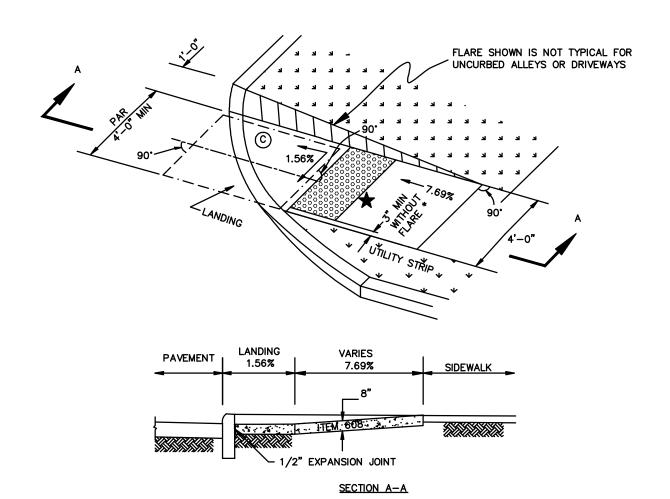
- A. THE BOTTOM EDGE OF THE RAMP SHALL CHANGE PLANES PERPENDICULAR TO THE LANDING.

 B. THE EDGE OF THE CURB SHALL BE FLUSH WITH THE EDGE OF THE ADJACENT PAVEMENT AND GUTTER.

 C. THE LANDING AT THE BOTTOM OF THE RAMP SHALL BE >= 2.5-FT BY 4-FT WITH A MAXIMUM CROSS SLOPE OF 1.56% IN TWO DIRECTIONS.
- THE PEDESTRIAN ACCESS ROUTE (PAR) BETWEEN THE TWO RAMPS SHALL HAVE A MAXIMUM OF 1.56% CROSS SLOPE WITH A 5% MAXIMUM RUNNING SLOPE
- THE 5% MAXIMUM COUNTERSLOPE WHERE THE BOTTOM OF THE RAMP MEETS THE STREET APPLIES TO BOTH STRAIGHT CURB AND CURB AND GUTTER SECTIONS

SEE SHEET 12/12 FOR DETECTABLE WARNING DETAILS

	CURB RAMP	CITY OF	
	TYPE G	HILLIAR	D, OHIO
DATE: March 6, 2015	RAMP WITH RECESSED		DARD ON DRAWING
SCALE: NTS	LOWER LANDING	6/12	CR-1



SUPPLEMENTAL NOTES

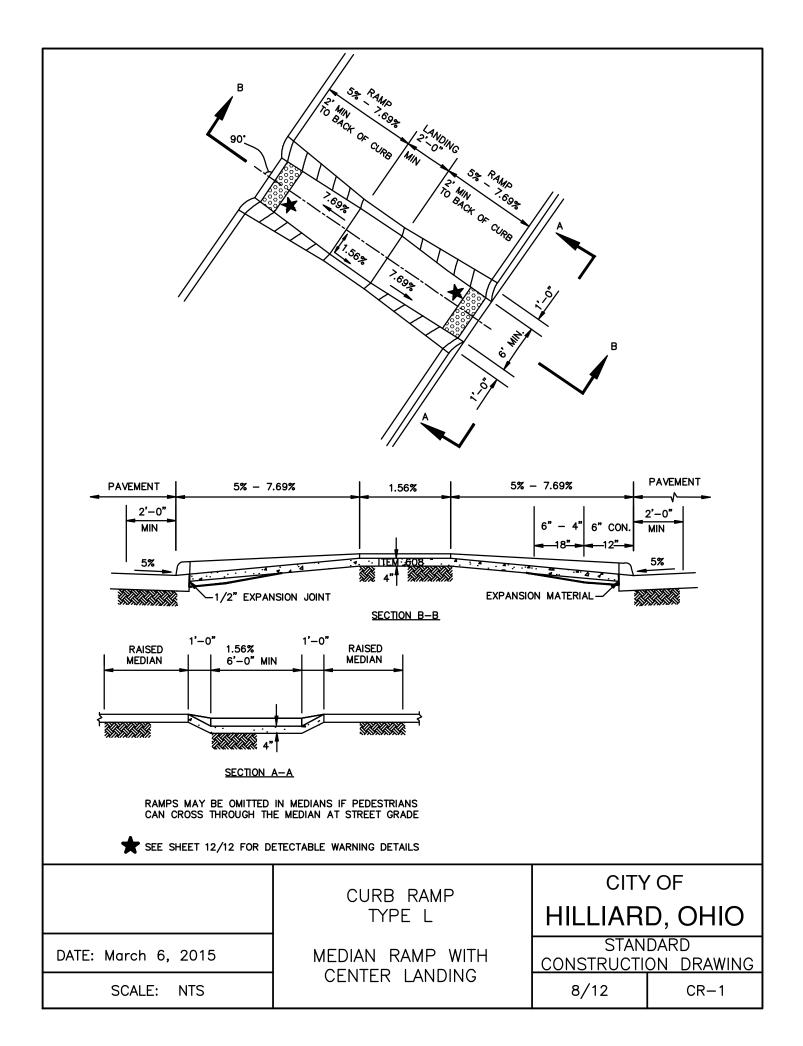
- A. THE BOTTOM EDGE OF THE RAMP SHALL CHANGE PLANES PERPENDICULAR TO THE LANDING.

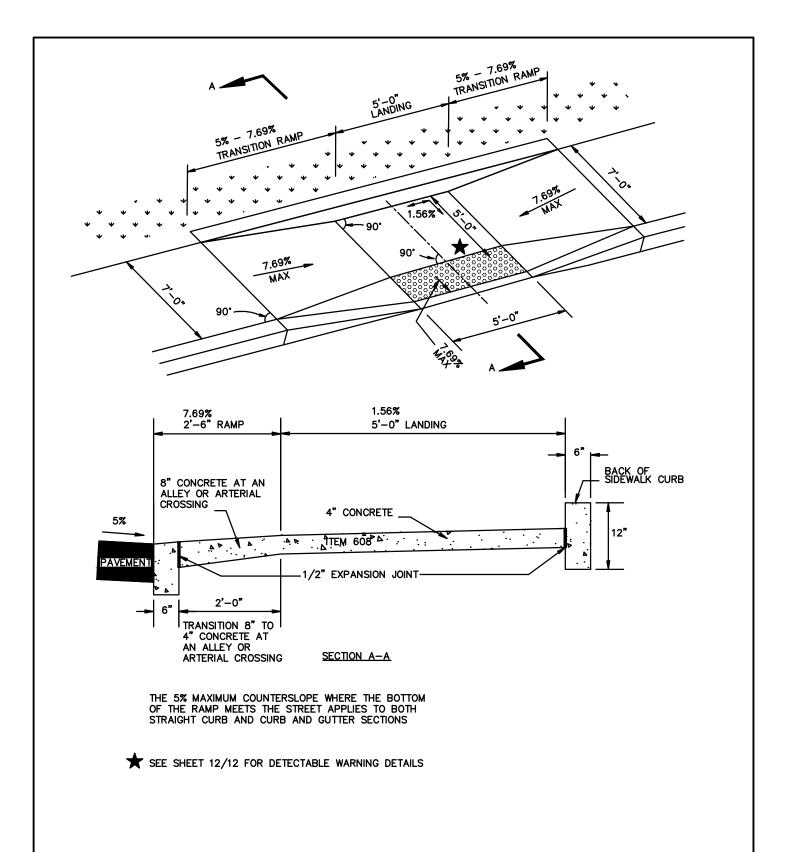
 B. THE EDGE OF THE CURB SHALL BE FLUSH WITH THE EDGE OF THE ADJACENT PAVEMENT AND GUTTER.

 C. THE LANDING AT THE BOTTOM OF THE RAMP SHALL BE >= 2.5-FT BY 4-FT WITH A MAXIMUM CROSS SLOPE OF 1.56% IN TWO DIRECTIONS.
- THE PEDESTRIAN ACCESS ROUTE (PAR) BETWEEN THE TWO RAMPS SHALL HAVE A MAXIMUM OF 1.56% CROSS SLOPE WITH A 5% MAXIMUM RUNNING SLOPE
- THE 5% MAXIMUM COUNTERSLOPE WHERE THE BOTTOM OF THE RAMP MEETS THE STREET APPLIES TO BOTH STRAIGHT CURB AND CURB AND GUTTER SECTIONS
- THIS IS FOR EMBEDDED (NON-SURFACE APPLIED) DETECTABLE WARNINGS ONLY

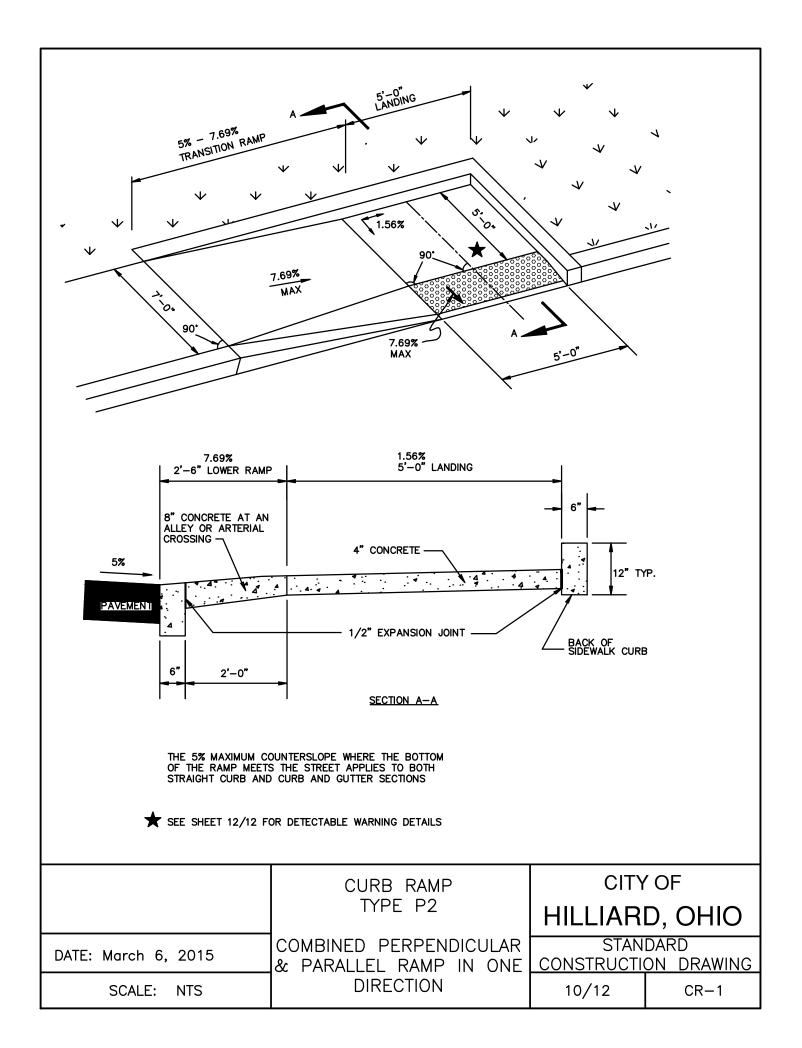
SEE SHEET 12/12 FOR DETECTABLE WARNING DETAILS

	CURB RAMP	CITY OF	
	TYPE H	HILLIAR	D, OHIO
DATE: March 6, 2015	RAMP WITH RECESSED LOWER LANDING IN	STAN CONSTRUCTI	-· ·· ·-
SCALE: NTS	UTILITY STRIP	7/12	CR-1





	CURB RAMP	CITY OF	
	TYPE P1	HILLIAR	D, OHIO
DATE: March 6, 2015	COMBINED PERPENDICULAR	STANDARD CONSTRUCTION DRAWING	
SCALE: NTS	& PARALLEL RAMP	9/12	CR-1

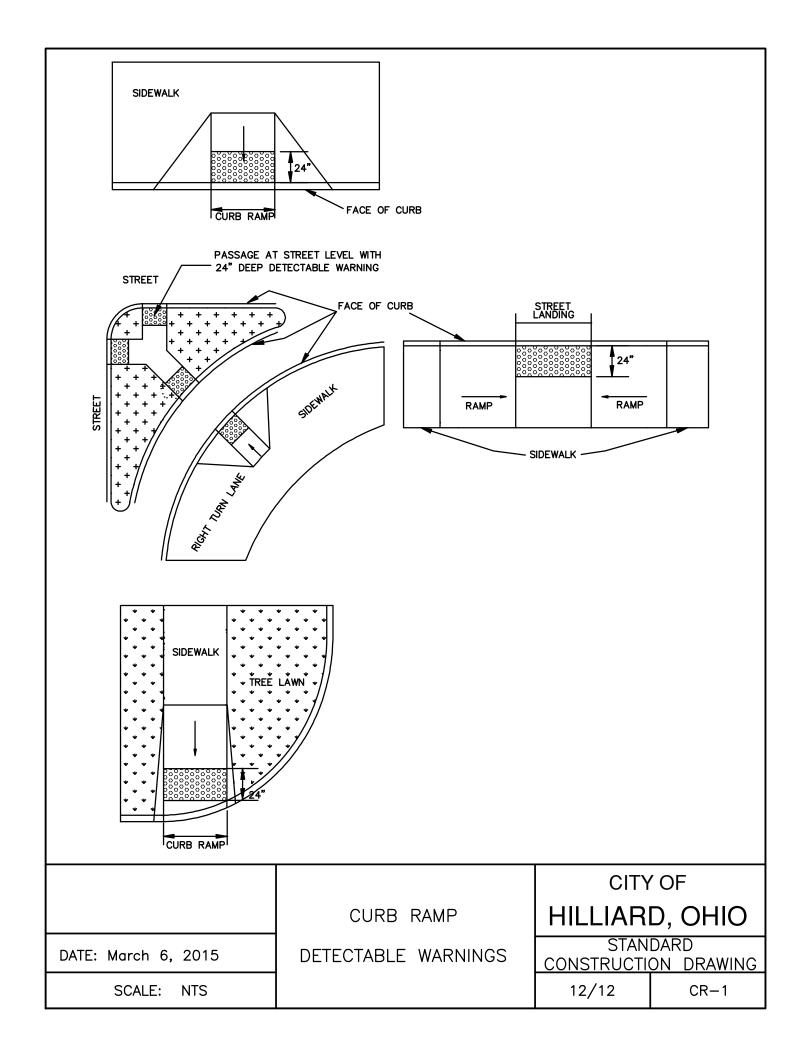


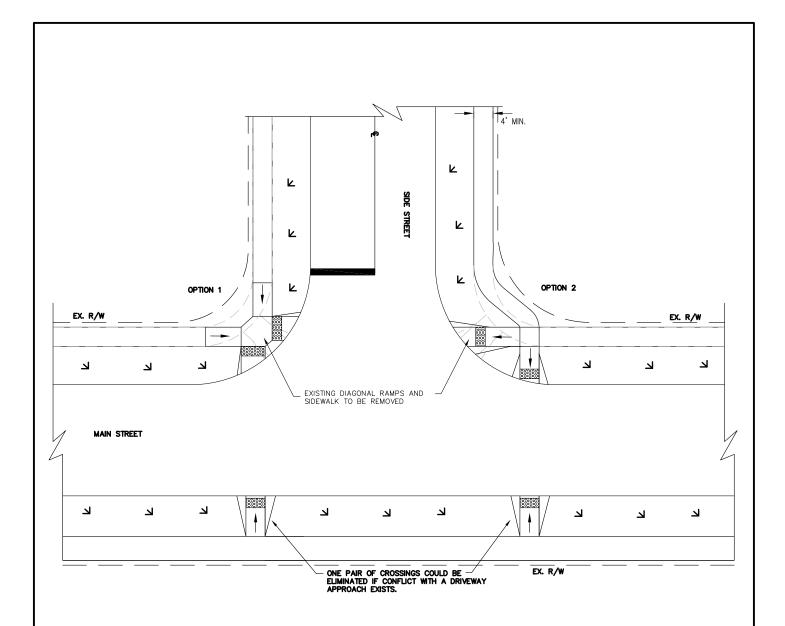
NOTES

- 1. DETECTABLE WARNINGS SHALL BE PROVIDED WHEREVER A CURB RAMP CROSSES A VEHICULAR WAY. EXCLUDING UNSIGNALIZED DRIVEWAY CROSSINGS. SEE #19 OF GENERAL CURB RAMP NOTES.
- 2. DETECTABLE WARNINGS SHALL BE PROVIDED 24" IN THE DIRECTION OF TRAVEL AND EXTEND THE FULL WIDTH OF THE CURB RAMP OR FLUSH SURFACE. THE DETECTABLE WARNING SHALL BE LOCATED ADJACENT TO THE CURB LINE.
- 3. DETECTABLE WARNINGS SHALL BE PLACED 6" TO 8" BEHIND THE FACE OF CURB AND BEHIND **CURB JOINT**
- 4. CAST IN PLACE OR ANY NON-SURFACE APPLIED DETECTABLE WARNING SHALL HAVE A MIN OF 3" OF CONCRETE ON EACH SIDE OF THE WARNING.
- 5. MATERIALS SHALL COMPLY WITH C.O.C. SUPPLEMENTAL SPECIFICATION 1551 WITH THE FOLLOWING NOTED EXCEPTIONS:
 - A. BRICK RED IS THE ONLY APPROVED COLOR UNLESS OTHERWISE APPROVED IN ADVANCE IN WRITING BY THE CITY ENGINEER
 - B. TYPE "A", "B" AND "C" DETECTABLE WARNING SURFACES ARE NOT APPROVED
 - C. TYPE "D" THIN TILE AND THIN MOLDED SHEET GOODS ARE APPROVED ON RETROFIT INSTALLATIONS ONLY.
 - THE PRE-APPROVED TYPE "D" MATERIAL IS "ARMOR TILE TACTILE SYSTEMS" FLAT SURFACE APPLIED MAT.
 - OTHER MATERIALS MAY BE SUBSTITUTED FOR THIS PRODUCT IF PRIOR APPROVAL IS GRANTED TO THE CITY ENGINEER
 - D. TYPE "E" PRE-MANUFACTURED WET-SET PROJECTS ARE APPROVED FOR USE ON NEW CONSTRUCTION ONLY. THESE PRODUCTS MUST BE 24" WIDE AND 1 THICK. ONE PIECE PANELS SHOULD BE USED FOR SIDEWALK INSTALLATIONS. ALL PRODUCTS MUST BE APPLIED ACCORDING TO THE MANUFACTURER'S SPECIFICATIONS AND GUIDELINES. THE TYPE "E" PRODUCTS PRE—APPROVED FOR USE IN THE CITY OF HILLIARD ARE LISTED BELOW.
 - ENGINEERED PLASTICS, INC. ARMOR-TILE CAST IN PLACE SYSTEMS

 - ADA SOLUTIONS, INC. COMPOSITE (WET SET) REPLACEABLE TWS UNIT
 ARMORCAST PRODUCTS COMPANY CAST IN PLACE DETECTABLE WARNING PANEL
 - OTHER MATERIALS MAY BE SUBSTITUTED FOR THE ABOVE LISTED PRODUCTS IF PRIOR APPROVAL IS GRANTED BY THE CITY ENGINEER.
 - E. DETECTABLE WARNINGS SHALL EXTEND THE ENTIRE WIDTH OF THE CURB RAMP FOR SIDEWALKS PARALLEL TO A PUBLIC STREET (SIDE PATHS). AND MULTI-USE PATHS LOCATED
 - F. DETECTABLE WARNING STRIPS MUST COMPLY WITH ADA SPECIFICATIONS FOR RAMP AREA, INCLUDING RUNNING SLOPE, CROSS-SLOPE, FLATNESS AND SMOOTHNESS CRITERIA AS WELL AS FLUSH TRANSITIONS BETWEEN THE CONCRETE RAMP AND THE DETECTABLE WARNING SURFACE.
 - G. ALL DETECTABLE WARNING STRIP INSTALLATIONS SHALL BE WARRANTED BY THE INSTALLING CONTRACTOR AND MANUFACTURER TO BE FREE OF DEFECTS FOR A PERIOD OF THREE (3)
 YEARS FROM THE DATE OF INSTALLATION. THE DETECTABLE WARNING STRIP SHALL LOSE NO
 MORE THAN FIVE PERCENT (5.0 %) OF TRUNCATED DOMES DUE TO DELAMINATION BECAUSE OF PRODUCT FAILURE. SURFACE SHALL BE WARRANTED FOR THAT 3-YEAR PERIOD FROM FADING, CHIPPING, CRACKING, PEELING, OR LOSS OF COLOR DUE TO THE EXPOSURE TO WEATHERING, DE-ICING SALTS, AND SUNLIGHT.

	CURB RAMP	CITY OF HILLIARD, OHIO	
DATE: March 6, 2015	DETECTABLE WARNING NOTES	STAN	DARD ON DRAWING
SCALE: NTS		11/12 CR-	





NOTES:

- I. EXISTING DIAGONAL RAMPS AND APPROACH WALK SHALL BE REMOVED IN ORDER TO CONSTRUCT FULLY COMPLIANT ADA RAMPS IN THE MANNER SHOWN IN OPTION 1 OR OPTION 2.
- 2. <u>OPTION 1</u> PROVIDES A SINGLE SHARED LOWER LANDING AREA AND TWO SEPARATE UPPER LANDING AREAS FOR EACH RAMP.
- 3. OPTION 2 PROVIDES A SINGLE SHARED UPPER LANDING AREA AND TWO SEPARATE LOWER LANDING AREAS FOR EACH RAMP.
- 4. FOR A 4-WAY INTERSECTION, 8 RAMPS SHALL BE PROVIDED. ELIMINATE THE SINGLE RAMP SHOWN ON THE BOTTOM OF THE MAIN STREET AND MIRROR THE CURB RAMP OPTIONS THAT ARE SHOWN ABOVE.
- 5. RAMP AND WALK WIDTH SHALL MATCH EXISTING OR 4' MIN, WHICHEVER IS GREATER.

			CITY OF	
	CURB RAMP	HILLIARD, OHIO		
DATE: March 6, 2015	RETROFIT	STANDARD CONSTRUCTION DRAWING		
SCALE: 1" = 20'		1/1	CR-2	

The following general CAD standards are to be followed on all plan submissions made to the City of Hilliard.

- The standard sheet size is to be 34"x22" with a 1/2" border along the top, bottom and right side of the sheet and a 1 1/2" border along the left side of the sheet. No exceptions.
- Minimum plan scale shall be 1"=50'.
- All text shall be readable from the bottom or right side side of the sheet. No upside down or backward text will be acceptable.
- The minimum acceptable text size for all existing features shall be 0.08" (1/12").
- The minimum acceptable text size for all proposed features shall be 0.10" (1/10").
- Text placement shall be such so as to avoid lines through text when possible.
- All bearings & distances shall be presented in the following manner: N 38°06'53" E 100.00'
- Bearings & distances for property boundaries shall proceed in a clockwise direction.
- Spot elevations provided on a hard surface (top of pavement, top of curb, top of casting, inverts, etc.)
 are to be to the nearest 0.01'. Spot elevations provided on soil (ditch bottoms, swales, etc.) are to be
 to the nearest 0.1'.
- All storm and sanitary lines shall have the direction of flow indicated on the plan view by placing flow arrows at the midpoint of the line.
- Labeling of existing storm sewers, sanitary sewers and water lines shall contain the Hilliard record plan number (HP-XXX) for the plan which constructed the utility.
- Polylines such as existing contours, existing edge of pavement, existing ground profiles etc. shall have the linetype generation enabled for said lines. Also the value for the settings LTSCALE and PSLTSCALE shall be set to 1.

APPROVED

CITY ENGINEER DATE

SCALE: NTS

CAD STANDARDS GENERAL CITY OF HILLIARD, OHIO

STANDARD CONSTRUCTION DRAWING

1/1

CS-1

<u>PROPOSED</u> **EXISTING** MANHOLE CATCH BASIN CURB INLET HEADWALL / ENDWALL FIRE HYDRANT Ω **(S)** \otimes WATER VALVE REDUCER <u>|</u>> CLEAN OUT <u>(c.o.</u> (co)

APPROVED

CITY ENGINEER DATE

SCALE: NTS

CAD STANDARDS STORM/SANITARY/WATER SYMBOLS CITY OF HILLIARD, OHIO

STANDARD
CONSTRUCTION DRAWING
1/1 CS-2

CONSTRUCTION ENTRANCE



INLET PROTECTION







FILTER FABRIC FENCE

----- FF -

MAJOR FLOOD ROUTING

>

DRAINAGE ARROW (PROPOSED, EXISTING)

900.0

(900.0)

SPOT ELEVATION — SOFT SURFACE (PROPOSED, EXISTING)

SPOT ELEVATION — HARD SURFACE (PROPOSED, EXISTING)

900,00

(900,00)

EXISTING DITCH

EXISTING 1' INTERMEDIATE

CONTOURS

— 899 —

9 — — — — — —

EXISTING 5' INDEX CONTOURS

—900— —

APPROVED

CITY ENGINEER

SCALE: NTS

DATE

CAD STANDARDS GRADING/EROSION CONTROL SYMBOLS CITY OF HILLIARD, OHIO

STANDARD CONSTRUCTION DRAWING

1/1

CS-3

1/1

CS-4

5:/Public Service - Engineering/Hilliard Standards/Drawings/ACAD/Cad Standards.dwg, 4/25/2013 8:29:49 AM

SCALE:

NTS

STREET LIGHT		
TRANSFORMER OR PEDESTAL	A	
PULL BOX	•	
DISCONNECT	-	
1 1/2" CONDUIT -		
2 1/2" STREET CROSSING CONDUIT =		

e - Engineering\Hilliard Standards\Drawings\ACAD\Cad Standards.dwg, 4/25/

APPROVED

CITY ENGINEER DATE

NTS

SCALE:

CAD STANDARDS STREET LIGHTING SYMBOLS CITY OF
HILLIARD, OHIO
STANDARD

CONSTRUCTION DRAWING
1/1 CS-5

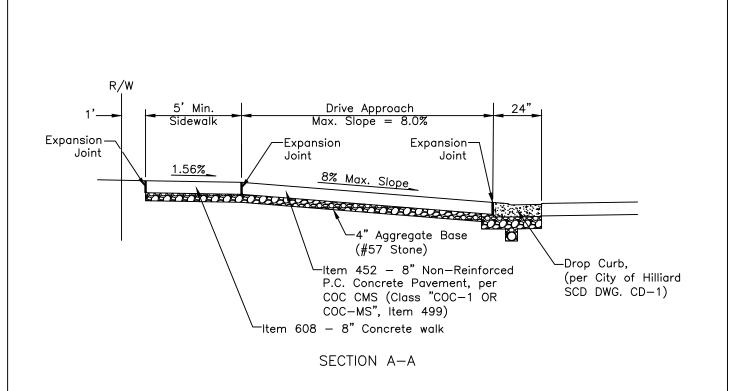
1/1

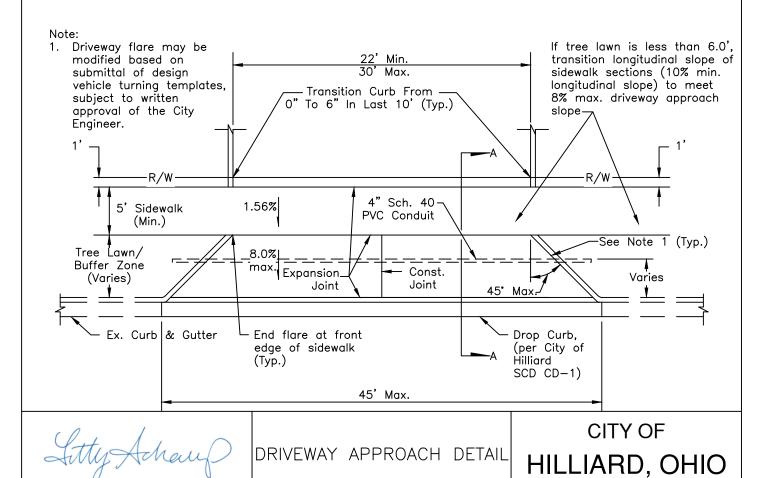
CS-6

5: Public Service - Engineering/Hilliard Standards/Drawings/ACAD\Cad Standards.dwg, 4/25/2013 8:30:16 AM

SCALE:

N/A





COMMERCIAL OR MIXED USE

ENTRANCE

DATE: March 06, 2023

NTS

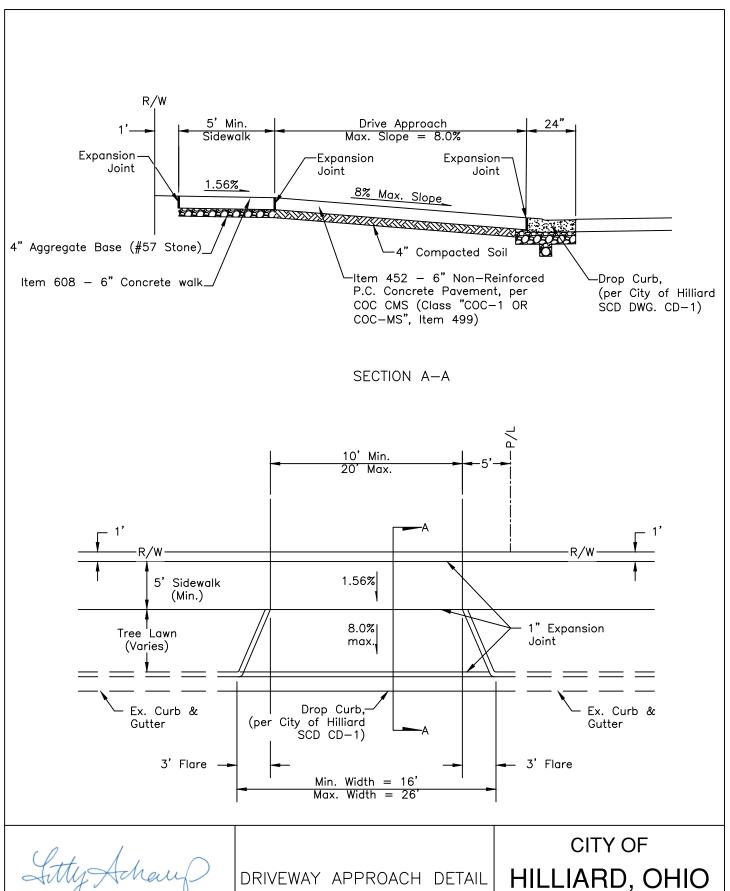
SCALE:

STANDARD

CONSTRUCTION DRAWING

DD-1

1/1



DATE: March 06, 2023

SCALE: NTS

RESIDENTIAL ENTRANCE

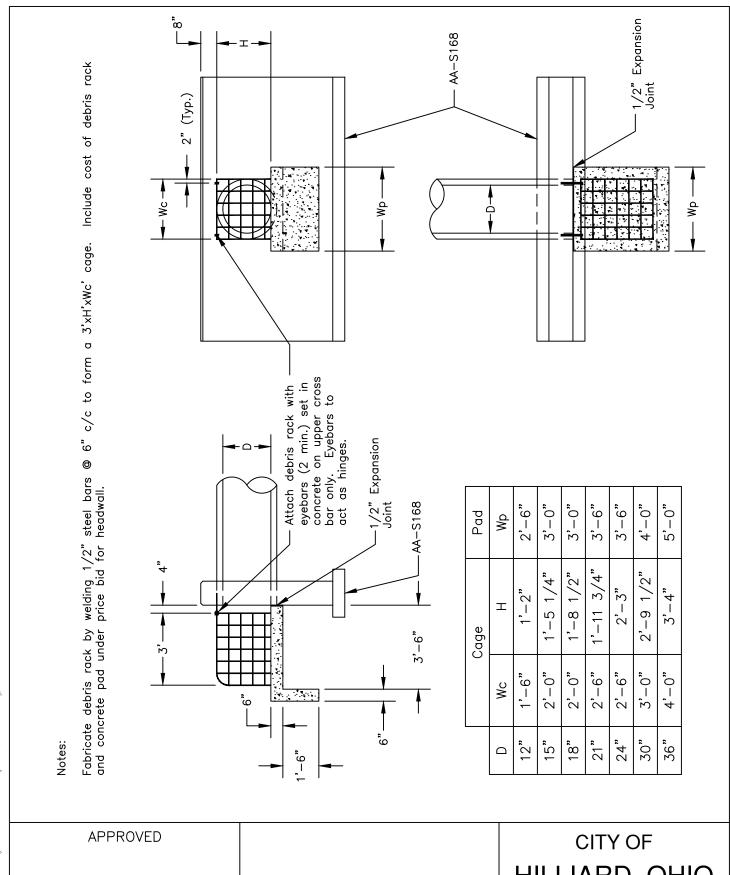
HILLIARD, OHIO

STANDARD CONSTRUCTION DRAWING

DD-2

1/1



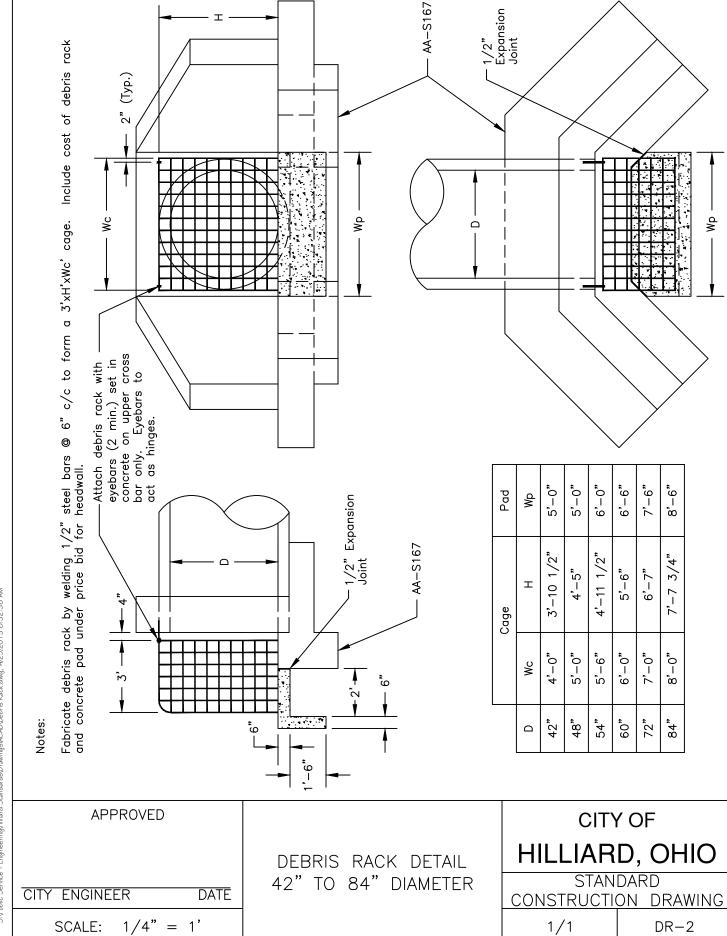


CITY ENGINEER DATE

SCALE: 1/4" = 1'

DEBRIS RACK DETAIL 12" TO 36" DIAMETER STANDARD
CONSTRUCTION DRAWING

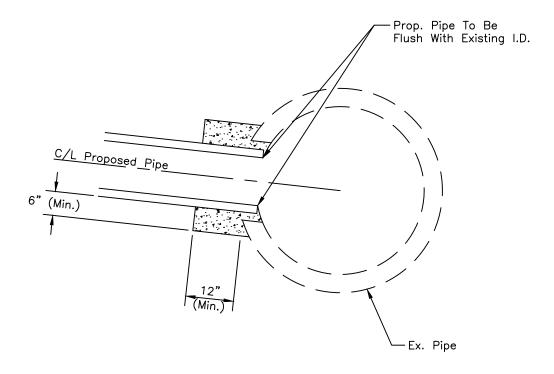
1/1 DR-1



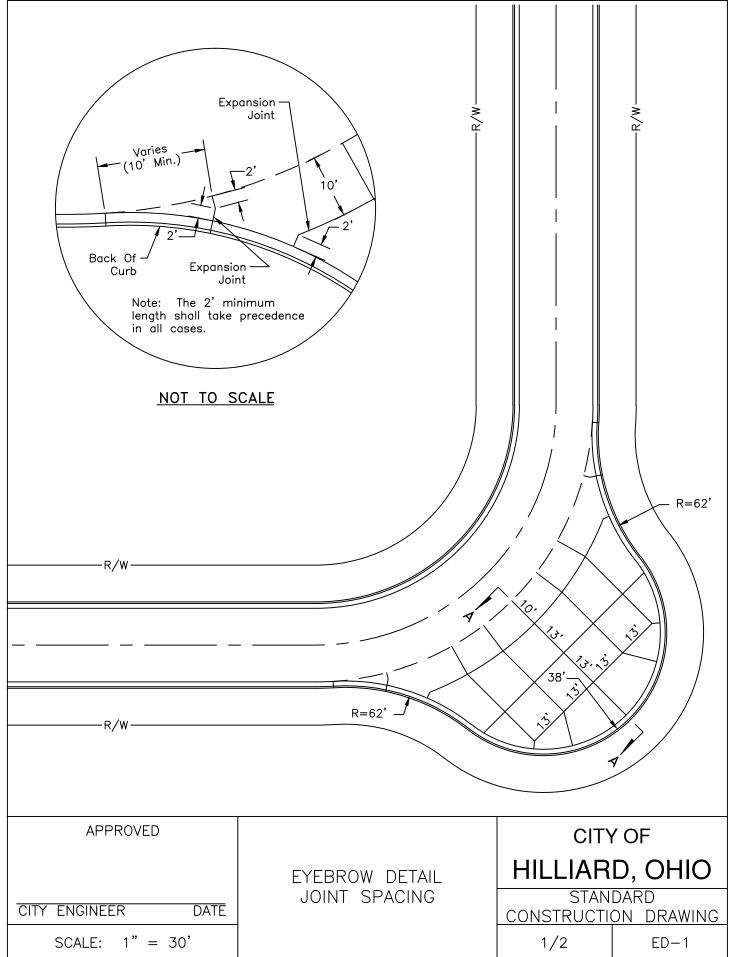
5:1Public Service - Engineering\Hilliard Standards\Drawings\ACAD\Debris Rack.dwg, 4/25/2013 8:32:38 AM

Notes:

The insert hole diameter in the existing pipe shall be a minimum 2" larger than the outside diameter of the proposed pipe. The reinforcing steel in the existing pipe shall be bent into the concrete collar. All cost of the direct tap shall be included in the price bid for storm sewer items. Flow in the existing pipe shall be maintained at all times.

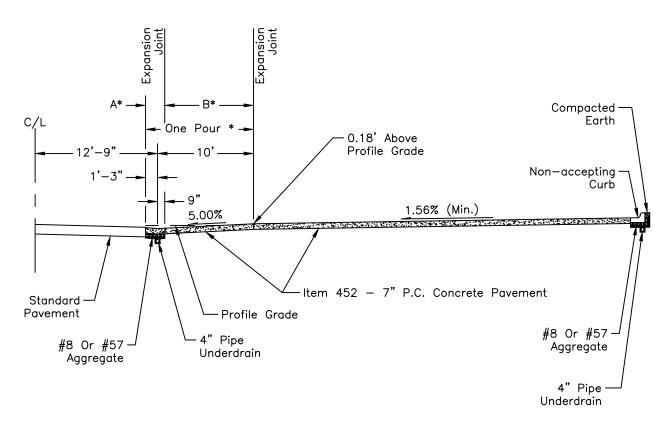


APPROVED		CITY OF	
	DIRECT TAP DETAIL	HILLIARD, OHIO	
CITY ENGINEER DATE		STANDARD CONSTRUCTION DRAWING	
SCALE: 1/2" = 1'		1/1	DT-1



5:Public Service - Engineering\Hilliard Standards\Drawings\ACAD\Eyebrow Detail.dwg, 4/25/2013 8:36:19 AM

From edge of pavement to 10' back of gutter line is to be either one pour or the alternate use of A & B with expansion joints between the A & B sections with 2-#4 rebar required in section A.



SECTION A-A

APPROVED

CITY ENGINEER DATE

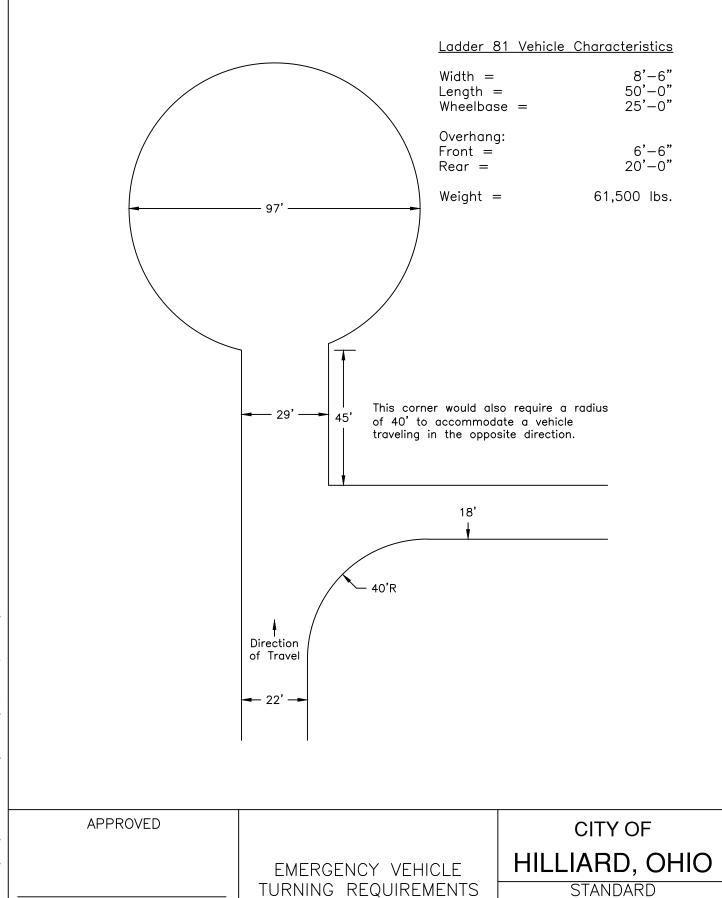
SCALE: 1" = 10'

EYEBROW DETAIL
TYPICAL SECTION A-A

CITY OF HILLIARD, OHIO

STANDARD
CONSTRUCTION DRAWING
2/2 ED-1

5:\Public Service - Engineering\Hilliard Standards\Drawings\ACAD\Eyebrow Detail.dwg, 4/25/2013 8:36:36 AM



CONSTRUCTION DRAWING

EV-1

1/1

5:Public Service - EngineeringVHIIIard StandardsDrawings\ACAD\Emergancy Vehicle Requirements.dwg, 4/25/2013 8:37:21 AM

CITY ENGINEER

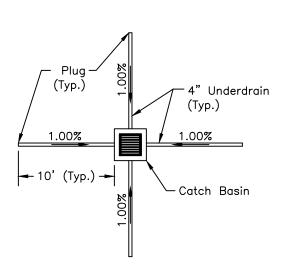
SCALE:

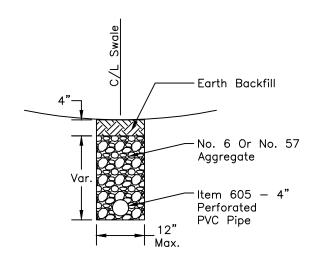
DATE

1/32" = 1'

Notes:

- 1. Install 10 foot lengths of 4" perforated PVC pipe out of the bottom of catch basins at a 1.00% grade. The upstream end shall be plugged. The underdrain shall be protected from construction traffic after installation.
- 2. Subgrade drains are to be installed at all catch basins.





TYPICAL UNDERDRAIN LAYOUT

SCALE: 1" = 10'

TYPICAL UNDERDRAIN DETAILS

SCALE: 1" = 2'

APPROVED

CITY ENGINEER DATE

SCALE: As Shown

FINGER DRAIN DETAIL

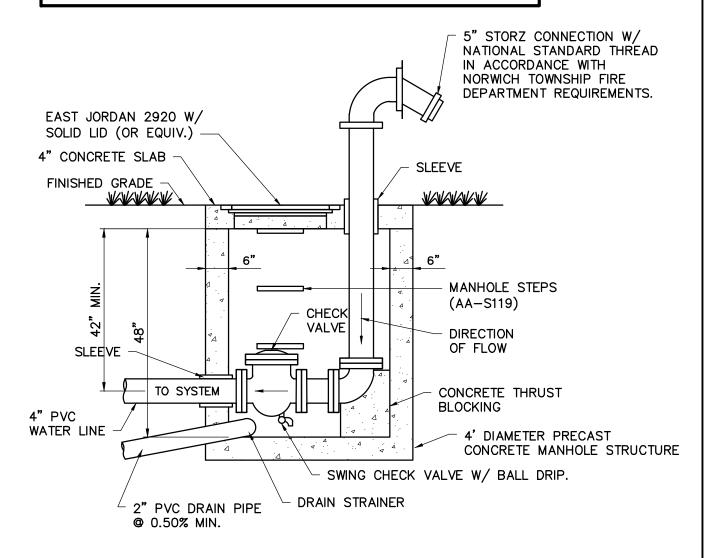
CITY OF HILLIARD, OHIO

STANDARD CONSTRUCTION DRAWING

1/1

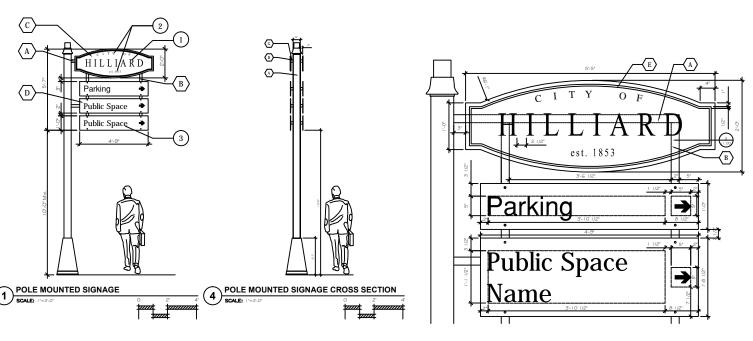
FD-1

CONTRACTOR TO INSTALL STROBE LIGHT & ADDRESS CARD IN ACCORDANCE WITH NORWICH TOWNSHIP FIRE DEPARTMENT STANDARDS. THE ADDRESS CARD WILL IDENTIFY THE BUILDING THAT EACH FDC SERVES.



		CITY OF	
	REMOTE FIRE DEPARTMENT	HILLIARD, OHIO	
DATE: September 7, 2016	CONNECTION	STANDARD CONSTRUCTION DRAWING	
SCALE: NTS		1/1	FDC-1

5:\Public Service - Engineering\Hilliard Standards\Drawings\ACAD\Guardrail Detail.dwg, 4/25/2013 8:39:11 AM



MATERIALS

HORIZONTAL SUPPORT POST (FRAME) - 2° RECTANGULAR ALUMINUM TUBE WITH END CAPS ANCHOR TO POLE (PROVIDE SHOP DRAWING) COLOR: 1175 FHWA BLUE

VERTICAL SUPPORT POST (FRAME) - 2" RECTANGULAR ALUMINUM TUBE WITH END CAPS WELD TO HORIZONTAL SUPPORT POSTS EXTENDING FROM POLE (PROVIDE SHOP DRAWING)

1/4" THICK ALUMINUM PANEL POWDER COATED, TEXT TO BE CENTERED IN PANEL WELD TO FRAME (PROVIDE SHOP DRAWING) COLOR: 1175 FHWA BLUE

1/4" THICK ALUMINUM PANEL POWDER COATED \bigcirc BOLT TO FRAME (PROVIDE SHOP DRAWING) COLOR: 1175 FHWA BLUE

DECORATIVE BAND IMPRESSION $\langle E \rangle$ COLOR:WHITE

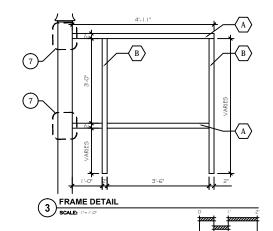
GENERAL NOTES

- I. 'City of' can be changed to 'Old' depending on location of signage.
- 2. All text and arrows shall be white.
- 3. There shall be no more than three directional panels, with the bottom panel at 10'-0" from grade.
- 4. Connection varies per pole material.
- 5. Match color of street signs in Old Hilliard for 'Hilliard Blue'.
- 6. All connections to match specified sign color.
- 7. Attach to pole as recommended by pole manufacturer.

Standard Construction Drawing GW-1

Note: Maximum text height is 5" to allow up to 14 characters and a directional arrow. Panel must increase in size to fit two lines of text when more than 14 characters are necessary.

ENLARGEMENT: VEHICULAR PANEL SCALE: NTS

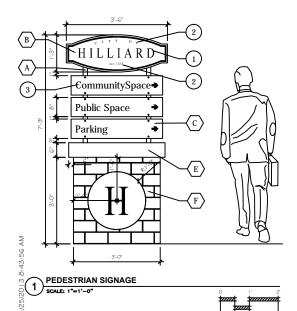


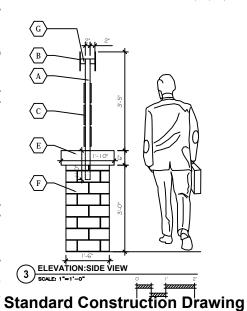
	TEXT CHART			
Label	Distance	Font Size	Font	
1	180'	6"	Times New Roman	ABCDEFGHI abcdefghi
2	60'	2"	Times New Roman	ABCDEFGHI abcdefghi
3	150'	Max. 5"	SansSerif	ABCDEFGHI abcdefghi

DESIGN NOTE: The sign manufacturer shall provide alternative materials and associated costs for client approval.



HILLARD ARD WAYFINDING + SIGNAGE 0.040





GW-2

Note: Maximum text height is 3" to allow up to 15 characters and a directional arrow. Panel must increase in size to fit two lines of text when more than 15 characters are necessary.

ENLARGEMENT: PEDESTRIAN PANEL SCALE: NTS

TEXT CHART				
Label	Distance	Font Size	Font	
1	l 20'	4"	Times New Roman	ABCDEFGHI abcdefghi
2	30'	1"	Times New Roman	ABCDEFGHI abcdefghi
(3)	90'	Max. 3"	SansSerif	ABCDEFGHI abcdefghi

MATERIALS

VERTICAL SUPPORT POST (FRAME) - 2" RECTANGULAR ALUMINUM TUBE WITH END CAPS CORE DRILL FRAME INTO WALL BASE COLOR: 1175 FHWA BLUE

B) 1/4" THICK ALUMINUM PANEL POWDER COATED, TEXT TO BE CENTERED IN PANEL WELD TO FRAME (PROVIDE SHOP DRAWING) COLOR: 11.75 FHWA BLUE

C) 1/2" THICK ALUMINUM PANEL POWDER COATED BOLT TO FRAME, FLUSH WITH FRAME (PROVIDE SHOP DRAWING) COLOR: 1175 FHWA BLUE

D DECORATIVE BAND IMPRESSION COLOR:WHITE

E LIMESTONE CAP, SMOOTH TOP AND BOTTOM, ROCK FACE SIDES 3'-4" L x 1'-10" W x 6" H

BRICK WALL BASE WITH LIMESTONE MEDALLION, ENGRAVE BLACK LETTER 'IP CENTERED WITHIN MEDALLION 3'-0' Lx '1'-6" W 3'-0' H

Medallion Details: 12" radius, 3.75" thick Indiana Buff light gray limestone Medallion with a 12" engraved letter 'H' (1/2" to 3/4" deep, colored black Lithium, Times New Roman). Center the 'H' in the center of the Medallion. Center the Medallion in the center of the brick wall base. The capstone is not part of the centering area. Medallion has a 1" beveled edge.

HORIZONTAL SUPPORT POST (FRAME) - 2" RECTANGULAR ALUMINUM TUBE WITH END CAPS
WELD TO VERTICAL SUPPORT POST (PROVIDE SHOP DRAWING)
COLOR: BLACK

GENERAL NOTES

- I. 'City of' can be changed to 'Old' depending on location of signage.
- 2. All text and arrows shall be white, except 'H' within the medallion.
- 3. Match color of street signs in Old Hilliard for 'Hilliard Blue'.

4. All connections to match specified sign color.

DESIGN NOTE: The sign manufacturer shall provide alternative materials and associated costs for client approval.

Char & Liste

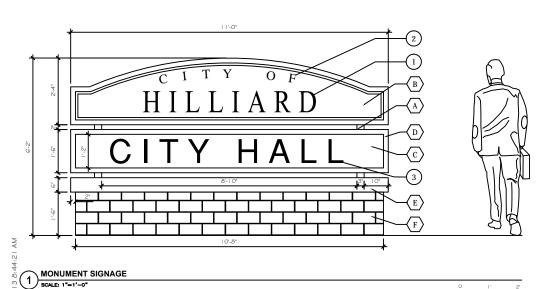
City of Hillard

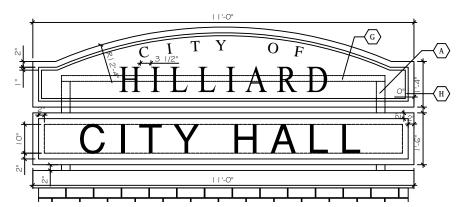
PENLLAND LIARD WAYFINDING + SIGNAGE ND, 040

Secretary OHO

job no: 00071 date: 34,12,001 sheet: L2.00

2 of: 9





ENLARGEMENT: MONUMENT PANEL 2 ENLARG SCALE: NTS

GENERAL NOTES

'City of' can be changed to 'Old' depending on location of signage. All text shall be white.

Standard Construction Drawing

Match color of street signs in Old Hilliard for 'Hilliard Blue'.

DESIGN NOTE: The sign manufacturer shall provide alternative materials and associated costs for client approval.

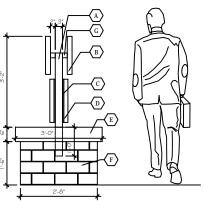
ELEVATION:SIDE VIEW SCALE: 1"=1'-0"



MATERIALS

- VERTICAL SUPPORT POST (FRAME) 3" RECTANGULAR ALUMINUM TUBE WITH END CAPS CORE DRILL FRAME INTO MONUMENT WALL COLOR: BLACK
- 2" THICK ALUMINUM PANEL POWDER COATED, TEXT TO BE CENTERED IN PANEL WELD TO FRAME (PROVIDE SHOP DRAWING) COLOR: BLACK
- 1/4" THICK ALUMINUM PANEL POWDER COATED, TEXT TO BE CENTERED IN PANEL WELD TO FRAME COLOR: HILLIARD BLUE
- 2" THICK RECTANGULAR ALUMINUM TUBE FRAME
 WELD TO 1/4" THICK ALUMINUM PANEL (PROVIDE SHOP DRAWING) COLOR:BLACK
- LIMESTONE CAP, SMOOTH TOP AND BOTTOM, ROCK FACE SIDES 11'-0" L x 3'-0" W x 6" H
- BRICK MONUMENT WALL 10'-8" L x 2'-8" W x 1'-6" H
- HORIZONTAL SUPPORT POST (FRAME) 2" RECTANGULAR ALUMINUM TUBE WITH END CAPS WELD TO VERTICAL SUPPORT POST (PROVIDE SHOP DRAWING) COLOR: BLACK
- DECORATIVE BAND IMPRESSION COLOR:WHITE

TEXT CHART				
Label	Distance	Font Size	Font	
1	270'	9"	Times New Roman	ABCDEFGHI abcdefghi
2	I 20'	4"	Times New Roman	ABCDEFGHI abcdefghi
3	300'	Max. 10"	SansSerif	ABCDEFGHI abcdefghi



SIGNAGE + STY OF HELMPD HILLIARD WAYFINDING HELMPD, 040

July 12, 2011 L3.00 3 of: 9

GW-3

|-20-|||\0607|-5ignage Submittal_|-20-||

MATERIALS

- VERTICAL SUPPORT POST (FRAME) 3" RECTANGULAR ALUMINUM TUBE WITH END CAPS CORE DRILL FRAME INTO MONUMENT WALL COLOR: BLACK
- HORIZONTAL SUPPORT POST (FRAME) 2" RECTANGULAR ALUMINUM TUBE WELD TO VERTICAL SUPPORT POSTS (PROVIDE SHOP DRAWING) COLOR: BLACK
- 1/4" THICK ALUMINUM PANEL POWDER COATED WELD TO FRAME (PROVIDE SHOP DRAWING) COLOR: BLACK
- 1/4" THICK ALUMINUM PANEL POWDER COATED, TEXT TO BE CENTERED IN PANEL WELD TO FRAME (PROVIDE SHOP DRAWING) COLOR: BLACK, TEXT COLOR: WHITE
- LIMESTONE CAP, SMOOTH TOP AND BOTTOM, ROCK FACE SIDES 16'-4" L x 3'-0" W x 6" H
- BRICK MONUMENT WALL WITH LIMESTONE MEDALLION, ENGRAVE BLACK LETTER 'H' CENTERED WITHIN MEDALLION I 6'-0" L x 2'-8" W x 3'-0" H

Medallion Details: 12" radius, 3.75" thick Indiana Buff light gray limestone Medallion with a 12" engraved letter 'H' (1/2" to 3/4" deep, colored black Lithium, Times New Roman). Center the 'H' in the center of the Medallion. Center the Medallion in the center of the brick wall base. The capstone is not part of the centering area. Medallion has a I" beveled edge.

- SUPPORT POST (FRAME) 2" RECTANGULAR ALUMINUM TUBE \langle $_{
 m G}
 angle$ WELD TO FRAME (PROVIDE SHOP DRAWING) COLOR: BLACK
- WIRE MESH: SQUARE WEAVE, PLAIN WEAVE, PLAIN CRIMP, STAINLESS STEEL USE McNICHOLS CO. FOR PRODUCT OR EQUIVALENT ATTACH TO FRAME (PROVIDE SHOP DRAWING)
- COMMUNITY SIGN ATTACH TO WIRE MESH (PROVIDE SHOP DRAWING)
- COMMUNITY ADVERTISEMENT/EVENT BOARD BOLT TO ALUMINUM PANEL (PROVIDE SHOP DRAWING) SEE SHEET L4.0 I FOR VARIOUS BOARD SIZES AND BOLT LOCATIONS
- DECORATIVE BAND IMPRESSION COLOR:WHITE

GENERAL NOTES

- 1. 'City of' can be changed to 'Old' depending on location of signage
- 2. All connections to match specified sign color.

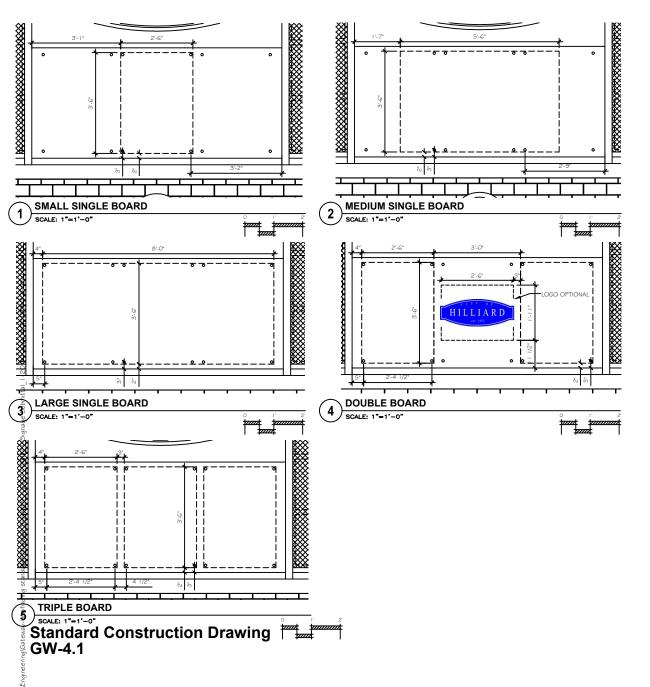
DESIGN NOTE: The sign manufacturer shall provide alternative materials and associated costs for client approval.

SIGNAGE + FILLIAND
LIARD WAYFINDING +
RD, 040



July 12, 2011 L4.00 4 of: 9

Standard Construction Drawing GW-4



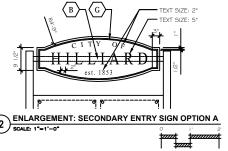
GENERAL NOTES

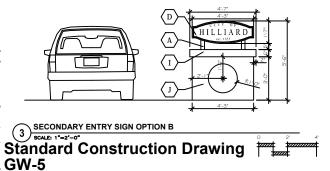
The community advertisement/event boards can be configured in different ways to maximize flexibility for various events.
 Optional Logic: Painted on 1/4* thick aluminum panel. Logo to be in the center of the aluminum panel.

OF HELMAD LIARID WAYFINDING + SIGNAGE MPD, OHO

DESIGN NOTE: The sign manufacturer shall provide alternative materials and associated costs for client approval.







MATERIALS VERTICA





C 1/4* THICK ALUMINUM PANEL POWDER COATED WELD TO FRAME (PROVIDE SHOP DRAWING) COLOR: BLACK

(D) | //4" THICK ALUMINUM PANEL POWDER COATED, TEXT TO BE CENTERED IN PANEL WELD TO FRAME (PROVIDE SHOP DRAWING) COLOR: BIACK, TEXT COLOR: WHITE

E LIMESTONE CAP, SMOOTH TOP AND BOTTOM, ROCK FACE SIDES 6'-4'' L x 2'-0'' W x 6'' H

BRICK MONUMENT WALL WITH LIMESTONE MEDALLION, ENGRAVE BLACK LETTER 'H' CENTERED WITHIN MEDALLION 6'-0' L x 1'-8' W x 3'-0' H

Medallion Details: 12" radius, 3.75" thick Indiana Buff light gray limestone Medallion with a 12" engraved letter 'ff (1/2" to 3/4" deep, colored black Lithium, Times New Roman). Center the 'ff' in the center of the Medallion. Center the Medallion in the center of the bnck wall base. The capstone is not part of the centering area. Medallion has a 1" beveled edge.

G DECORATIVE BAND IMPRESSION COLOR: WHITE

COMMUNITY ADVERTISEMENT BOARD BOLT TO ALUMINUM PANEL (PROVIDE SHOP DRAWING)

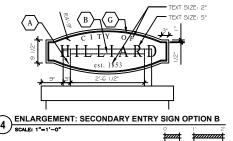
LIMESTONE CAP, SMOOTH TOP AND BOTTOM, ROCK FACE SIDES

BRICK MONUMENT WALL WITH LIMESTONE MEDALLION, ENGRAVE BLACK LETTER 'H' CENTERED WITHIN MEDALLION 4'-3" L x 1'-2" W x 3'-0" H

Medallion Details: 12° radius, 3.75° thick Indiana Buff light gray limestone Medallion with a 12° engraved letter 'IT ($1/2^{\circ}$ to $3/4^{\circ}$ deep, colored black Lithium, Times New Roman). Center the 'IT' in the center of the Medallion. Center the Medallion in the center of the brick wall base. The capstone is not part of the centering area. Medallion has a 1° beveled edge.

GENERAL NOTES

- 1. 'City of' can be changed to 'Old' depending on location of signage.
- 2. All connections to match specified sign color.



DESIGN NOTE: The sign manufacturer shall provide alternative materials and associated costs for client approval.

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HILLIARD
City of Hard

+ SIGNAGE

JARD WAYFINDING

no. revisions: by:



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LIMESTONE CAP, SMOOTH TOP AND BOTTOM, ROCK FACE SIDES 3'-4" L x 1'-6" W x 6" H



BRICK COLUMN WITH LIMESTONE MEDALLION, ENGRAVE BLACK LETTER 'H' CENTERED WITHIN MEDALLION 3'-0" L x 1'-2" W x 3'-6" H

Medallion Details: 12" radius, 3.75" thick Indiana Buff light gray limestone Medallion with a 12" engraved letter 'If' (1/2" to 3/4" deep, colored black Lithium, Times New Roman). Center the 'If' in the center of the Medallion. Center the Medallion in the center of the brick wall base. The capstone is not part of the centering area. Medallion has a 1" beveled edige.

DESIGN NOTE: The sign manufacturer shall provide alternative materials and associated costs for client approval.

Standard Construction Drawing
GW-6

IARD WAYFINDING + SIGNAGE

HILLARD OFFO

job no: 00071
date: 347 18, 2011
sheet:
L6.00



GENERAL NOTES

- 1. ZONE 'A': Shall include plants that are 3'-4' hgt. at maturity. These could include Maiden Grass or Knockout Rose.
- 2. Trees shall be located at the outside edge of Zone 'A'.
 3. ZONE 'B': Shall include plants that are 12"-2' hgt. at maturity. These could include Junipers, Spirea, or Dwarf Fountain Grass.
- All lighting to be ground mounted; no internal lift signage allowed per zoning code. There shall be an even wash of light on the sign, with no hot spots. Refer to the Hilliard zoning code to verify the lighting designs comply with code.

HELLAND JARD WAYFINDING + SIGNAGE D. 040

8 of: 9









MONUMENT WAYFINDING

SCALE: 1"=2"-0"

GITY OF HELMAD

GITY OF HELMAD

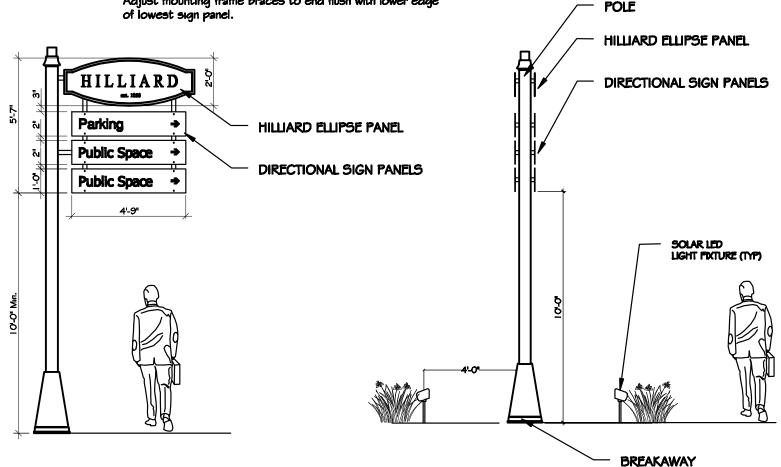
HILLIARD WAYFINDING + SIGNAGE

HILLIARD, 940

job no: 00071 date: July 12, 2011 sheet: L8.00 9 of: 9

Standard Construction Drawing GW-8

48\Signage Submittal 1-20-11\06071-Signage Submittal_1-20-11.dwg, 4/25/2013 8:46:55 AM



CROSS SECTION

SCALE: NOT TO SCALE

MOUNTING

GENERAL NOTES

SIGN PANELS SHALL BE OF HEIGHT AND LENGTH AS SHOWN ON DRAWINGS. THE HEIGHT TO WIDTH RATIO OF THE HILLIARD ELLIPSE SIGN PANEL SHALL BE 1 TO 2.73.

ALL COMPONENTS & SURFACES SHALL BE SPRAY PAINTED WITH POLYURETHANE PRIME COAT FOLLOWED BY POLYURETHANE COLOR COAT, OR POWDER COATED.

SIGN PANELS, PANEL BRACES, AND POLES SHALL BE PPG MATHEWS BLACK, EITHER PAINTED OR POWDER COATED.

SIGN PANELS SHALL HAVE WHITE VINYL LETTERS AND ARROWS, AND WHITE VINYL TRIM BAND. WHITE VINYL SHALL BE REFLECTIVE 3M-PRODUCT 680-10 OR EQUAL.

LETTERING ON THE HILLIARD ELLIPSE SIGNS SHALL BE TIMES NEW ROMAN REGULAR AND CENTERED IN THE SIGN. SIZE AS NOTED ON DETAILS.

LETTERING ON HILLIARD DIRECTIONAL SIGN PANELS SHALL BE PURITAN 2.0 AND CENTERED IN THE SIGN. SIZE AS NOTED ON DETAILS.

ALL EXPOSED FASTENERS SHALL BE PAINTED BLACK OR WHITE TO MATCH BACKGROUND

PROVIDE SHOP DRAWINGS TO HILLIARD SERVICE DIRECTOR FOR REVIEW AND APPROVAL.

MATERIALS

ALL SIGN PANELS SHALL BE 1/4" THICK ALUMINUM WITH MAXIMUM .090 FLAT SURFACE VARIATION.

SIGN PANEL BRACES SHALL BE 2" SQUARE ALUMINUM TUBE WITH END CAPS. BRACES SHALL BE WELDED INTO SUPPORT FRAME. SIGN PANELS SHALL BE THROUGH-BOLTED TO BRACES.

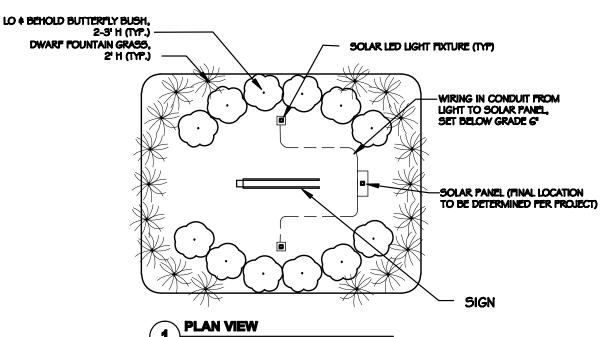
BRACES/SUPPORT FRAME SHALL BE MOUNTED TO POLES WITH BRACKET SYSTEM PER MANUFACTURER'S INSTRUCTIONS.

POLES SHALL BE STERNBERG ALUMINUM #3500 CHARLESTON SERIES (IN OLDE HILLIARD), OR STERNBERG ROUND TAPERED ALUMINUM POLES (CITY OF HILLIARD), OR EOUAL, POLES SHALL HAVE BREAK-AWAY MOUNTS INSTALLED PER MANUFACTURER'S INSTRUCTIONS, AND BE SIZED FOR WIND LOADING.

STEEL FASTENERS SHALL BE ZINC COATED.

CONCRETE SHALL BE AS PER ODOT ITEM 499.

LIGHT SYSTEM SHALL BE SOLAR POWERED LOW VOLTAGE LED AS MANUFACTURED BY US GREENSHINE (WWW.GREENSHINE-SOLAR.COM) OR EQUAL.



NOTE: PLANTINGS MUST COMPLETELY SCREEN ALL LIGHT FIXTURES AT MATURITY.

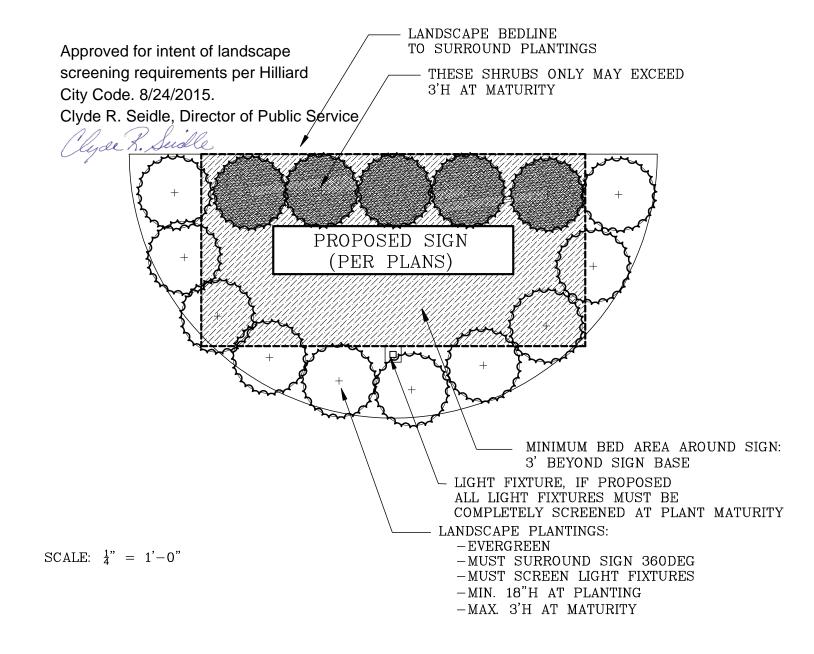
SIGNAGE RD WAYFINDING



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ELEVATION

SCALE: NOT TO SCALE

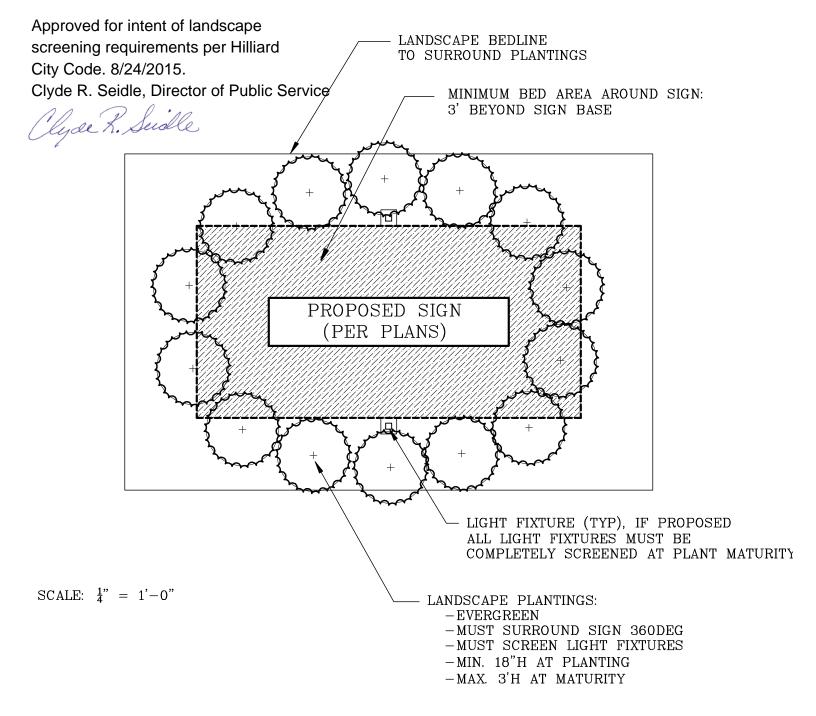


PER CITY OF HILLIARD ZONING CODE, SECTION 1129:

"GROUND SIGN BASE SHALL BE:

- 1. CONSTRUCTED OF CONCRETE, BRICK OR STONE AND THERE SHALL BE NO SPACE BETWEEN THE SIGN FACE OR FRAME AND THE TOP OF BASE.
- 2. FINISHED IN ONLY ONE COLOR WHICH SHALL BE BLACK, WHITE, GRAY, BROWN OR SOME NEUTRAL VARIATION OF BROWN.
- 3. EFFECTIVELY LANDSCAPED WITH EVERGREEN PLANT MATERIAL AND CONTINUOUSLY MAINTAINED. THE MINIMUM LANDSCAPED AREA SHALL EXTEND AT LEAST THREE FEET BEYOND THE BASE IN ALL DIRECTIONS."

CITY OF HILLIARD — LANDSCAPE STANDARD FOR PRIVATE SIGNAGE FOR SINGLE-FACED SIGNAGE PARALLEL TO ROW



PER CITY OF HILLIARD ZONING CODE, SECTION 1129:

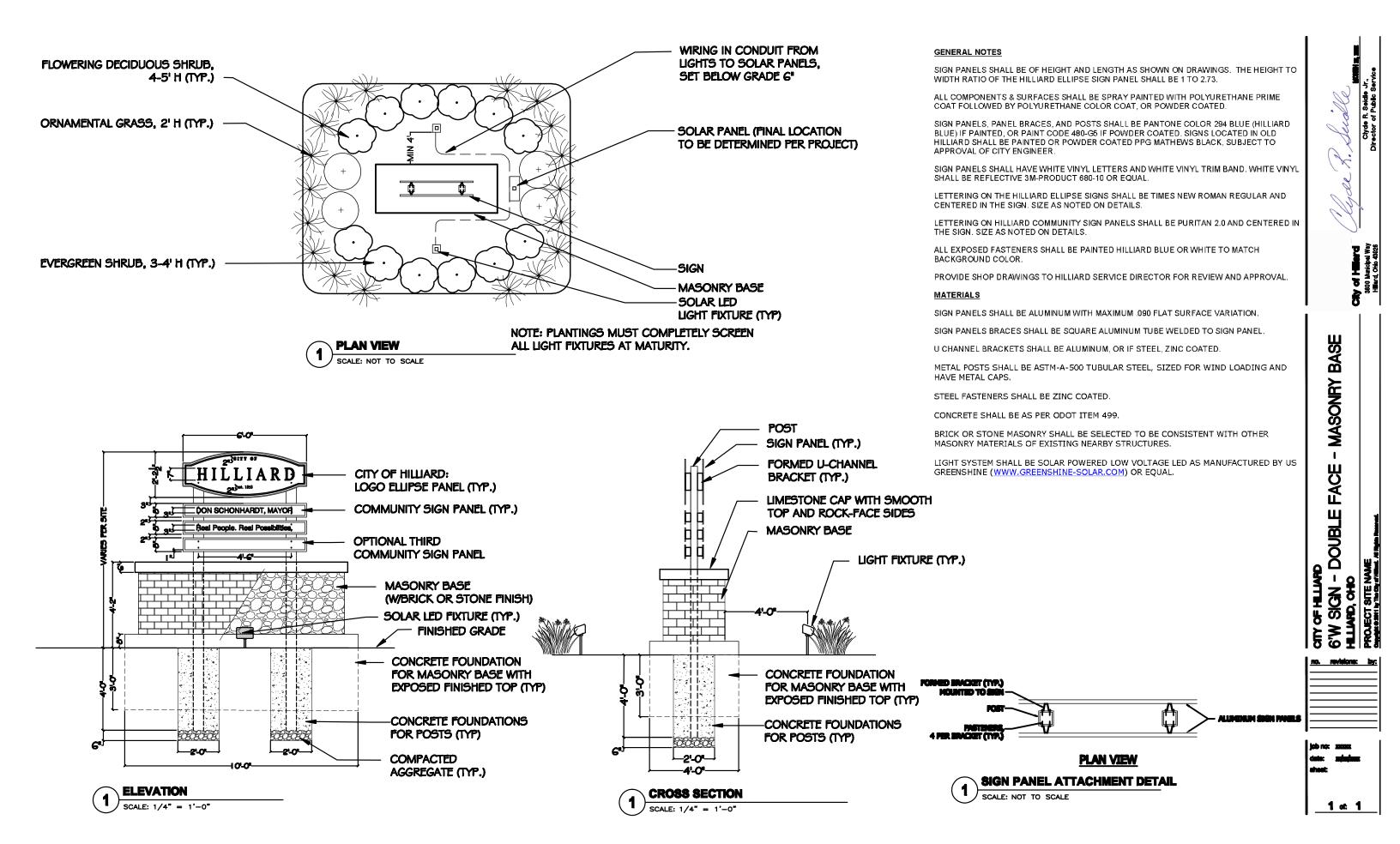
"GROUND SIGN BASE SHALL BE:

1. CONSTRUCTED OF CONCRETE, BRICK OR STONE AND THERE SHALL BE NO SPACE BETWEEN THE SIGN FACE OR FRAME AND THE TOP OF BASE.

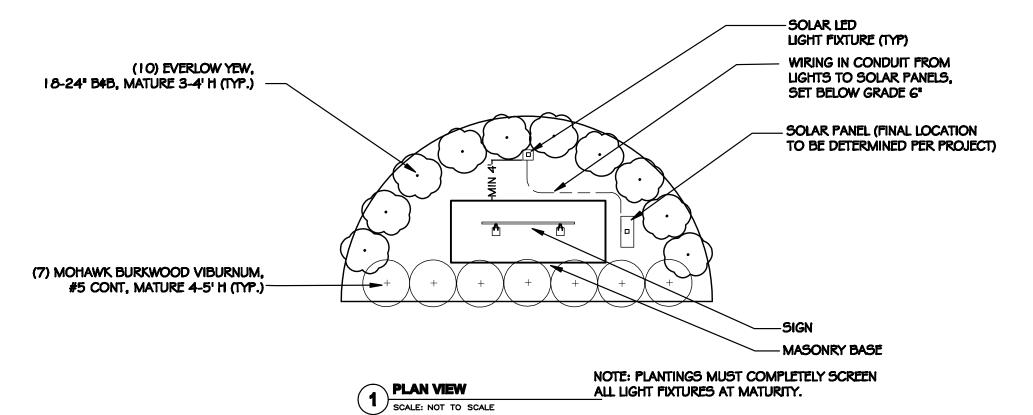
2. FINISHED IN ONLY ONE COLOR WHICH SHALL BE BLACK, WHITE, GRAY, BROWN OR SOME NEUTRAL VARIATION OF BROWN.

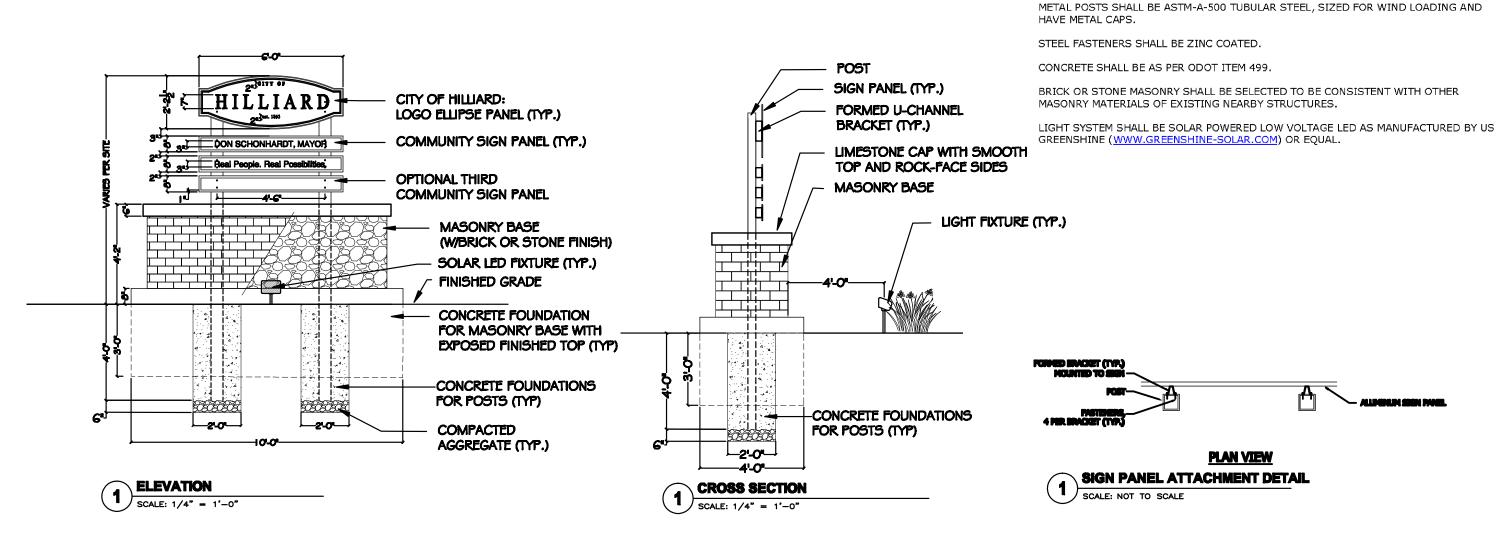
3. EFFECTIVELY LANDSCAPED WITH EVERGREEN PLANT MATERIAL AND CONTINUOUSLY MAINTAINED. THE MINIMUM LANDSCAPED AREA SHALL EXTEND AT LEAST THREE FEET BEYOND THE BASE IN ALL DIRECTIONS."

CITY OF HILLIARD — LANDSCAPE STANDARD FOR PRIVATE SIGNAGE FOR DOUBLE-FACED SIGNAGE PERPENDICULAR TO ROW









GENERAL NOTES

APPROVAL OF CITY ENGINEER.

THE SIGN. SIZE AS NOTED ON DETAILS.

BACKGROUND COLOR.

MATERIALS

SHALL BE REFLECTIVE 3M-PRODUCT 680-10 OR EQUAL.

CENTERED IN THE SIGN. SIZE AS NOTED ON DETAILS.

SIGN PANELS SHALL BE OF HEIGHT AND LENGTH AS SHOWN ON DRAWINGS. THE HEIGHT TO

ALL COMPONENTS & SURFACES SHALL BE SPRAY PAINTED WITH POLYURETHANE PRIME COAT FOLLOWED BY POLYURETHANE COLOR COAT, OR POWDER COATED.

BLUE) IF PAINTED, OR PAINT CODE 480-G5 IF POWDER COATED. SIGNS LOCATED IN OLD HILLIARD SHALL BE PAINTED OR POWDER COATED PPG MATHEWS BLACK, SUBJECT TO

SIGN PANELS, PANEL BRACES, AND POSTS SHALL BE PANTONE COLOR 294 BLUE (HILLIARD

SIGN PANELS SHALL HAVE WHITE VINYL LETTERS AND WHITE VINYL TRIM BAND. WHITE VINYL

LETTERING ON HILLIARD COMMUNITY SIGN PANELS SHALL BE PURITAN 2.0 AND CENTERED IN

LETTERING ON THE HILLIARD ELLIPSE SIGNS SHALL BE TIMES NEW ROMAN REGULAR AND

PROVIDE SHOP DRAWINGS TO HILLIARD SERVICE DIRECTOR FOR REVIEW AND APPROVAL.

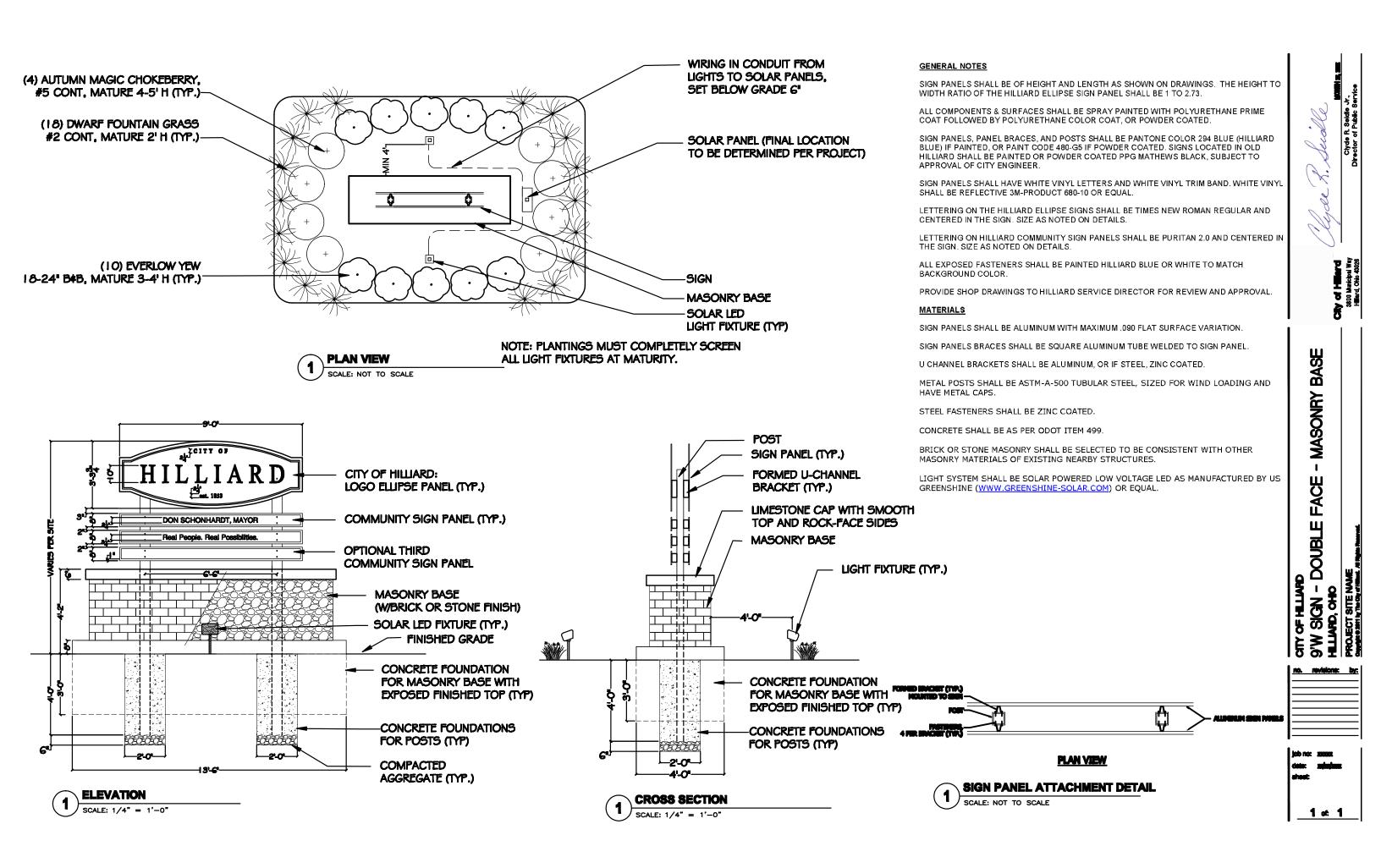
ALL EXPOSED FASTENERS SHALL BE PAINTED HILLIARD BLUE OR WHITE TO MATCH

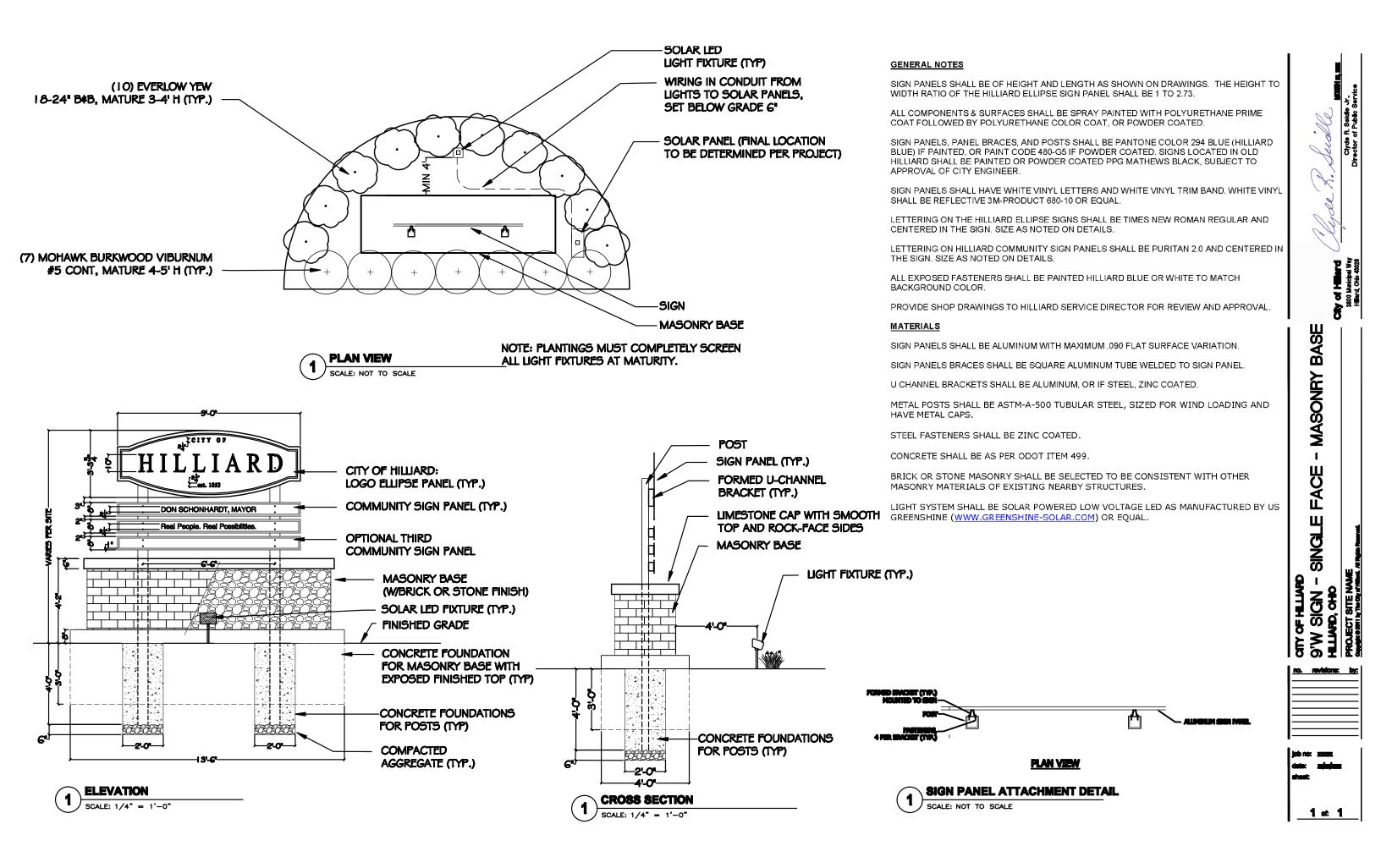
SIGN PANELS SHALL BE ALUMINUM WITH MAXIMUM .090 FLAT SURFACE VARIATION.

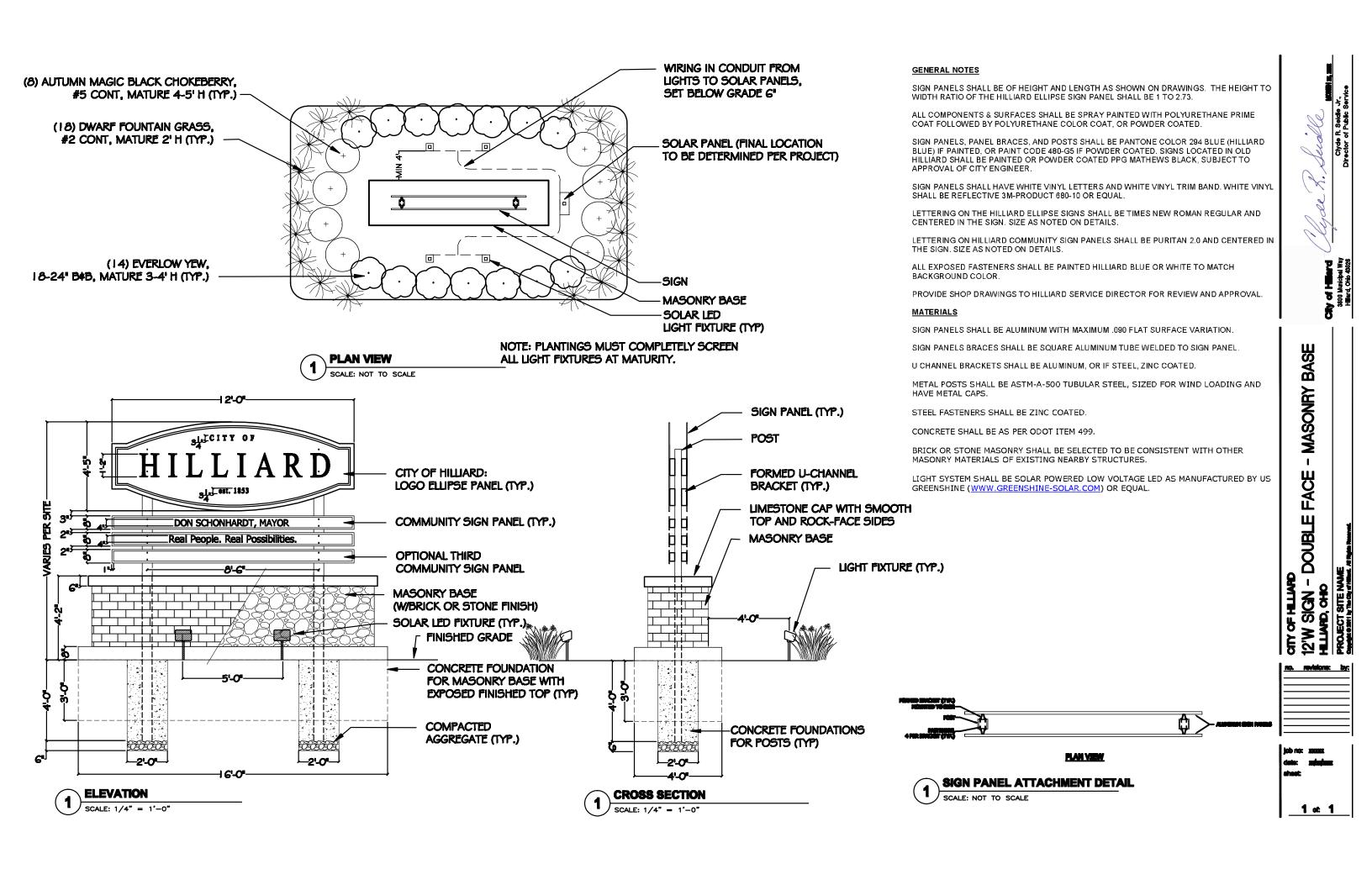
SIGN PANELS BRACES SHALL BE SQUARE ALUMINUM TUBE WELDED TO SIGN PANEL.

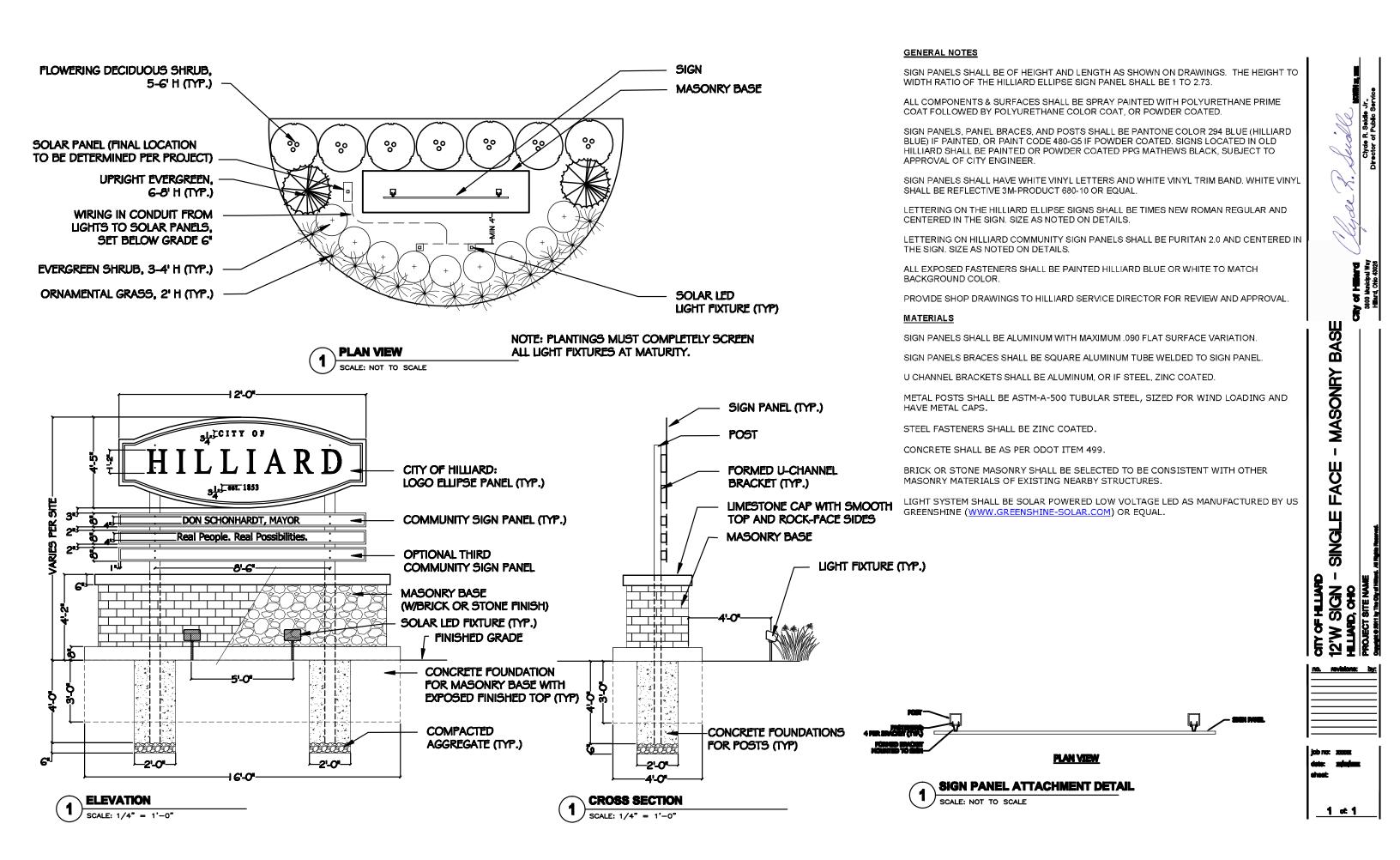
U CHANNEL BRACKETS SHALL BE ALUMINUM, OR IF STEEL, ZINC COATED.

WIDTH RATIO OF THE HILLIARD ELLIPSE SIGN PANEL SHALL BE 1 TO 2.73.



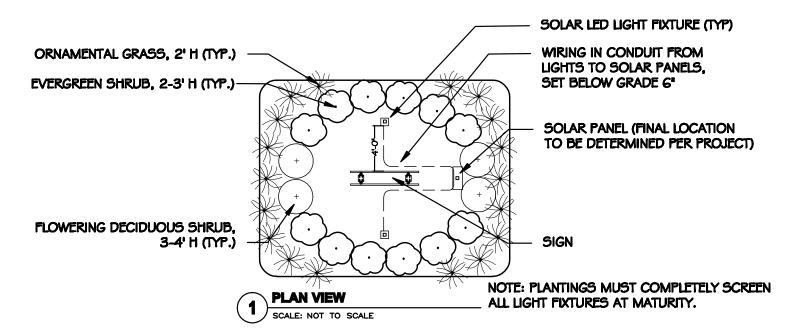


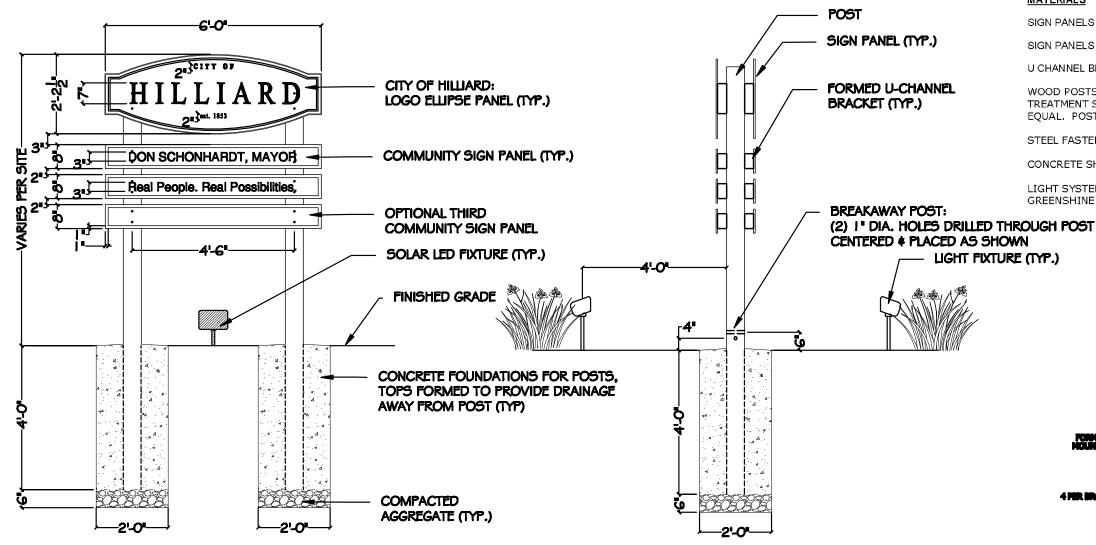




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GENERAL NOTES

SIGN PANELS SHALL BE OF HEIGHT AND LENGTH AS SHOWN ON DRAWINGS. THE HEIGHT TO WIDTH RATIO OF THE HILLIARD ELLIPSE SIGN PANEL SHALL BE 1 TO 2.73.

ALL COMPONENTS & SURFACES SHALL BE SPRAY PAINTED WITH POLYURETHANE PRIME COAT FOLLOWED BY POLYURETHANE COLOR COAT. OR POWDER COATED.

SIGN PANELS, PANEL BRACES, AND POSTS SHALL BE PANTONE COLOR 294 BLUE (HILLIARD BLUE) IF PAINTED, OR PAINT CODE 480-G5 IF POWDER COATED. SIGNS LOCATED IN OLD HILLIARD SHALL BE PAINTED OR POWDER COATED PPG MATHEWS BLACK, SUBJECT TO APPROVAL OF CITY ENGINEER.

SIGN PANELS SHALL HAVE WHITE VINYL LETTERS AND WHITE VINYL TRIM BAND. WHITE VINYL SHALL BE REFLECTIVE 3M-PRODUCT 680-10 OR EQUAL.

LETTERING ON THE HILLIARD ELLIPSE SIGNS SHALL BE TIMES NEW ROMAN REGULAR AND CENTERED IN THE SIGN. SIZE AS NOTED ON DETAILS.

LETTERING ON HILLIARD COMMUNITY SIGN PANELS SHALL BE PURITAN 2.0 AND CENTERED IN THE SIGN. SIZE AS NOTED ON DETAILS.

ALL EXPOSED FASTENERS SHALL BE PAINTED HILLIARD BLUE OR WHITE TO MATCH BACKGROUND COLOR.

PROVIDE SHOP DRAWINGS TO HILLIARD SERVICE DIRECTOR FOR REVIEW AND APPROVAL.

MATERIALS

SIGN PANELS SHALL BE ALUMINUM WITH MAXIMUM .090 FLAT SURFACE VARIATION.

SIGN PANELS BRACES SHALL BE SQUARE ALUMINUM TUBE WELDED TO SIGN PANEL.

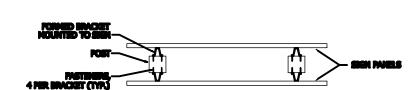
U CHANNEL BRACKETS SHALL BE ALUMINUM, OR IF STEEL, ZINC COATED.

WOOD POSTS SHALL BE PRESSURE TREATED #2 SOUTHERN YELLOW PINE. PRESSURE TREATMENT SHALL BE MICRONIZED COPPER AZOLE, CHEMICAL RETENTION OF .015; OR EQUAL. POSTS SHALL BE BREAK-AWAY, AND SIZED FOR WIND LOADING.

STEEL FASTENERS SHALL BE ZINC COATED.

CONCRETE SHALL BE AS PER ODOT ITEM 499.

LIGHT SYSTEM SHALL BE SOLAR POWERED LOW VOLTAGE LED AS MANUFACTURED BY US GREENSHINE (<u>WWW.GREENSHINE-SOLAR.COM</u>) OR EQUAL.







1 ELEVATION

SCALE: 3/8" = 1'-0"

CROSS SECTION

SCALE: 3/8" = 1'-0"

CROSS SECTION

SCALE: 3/8" = 1'-0"

ELEVATION

SCALE: 3/8" = 1'-0"

- WOOD POSTS

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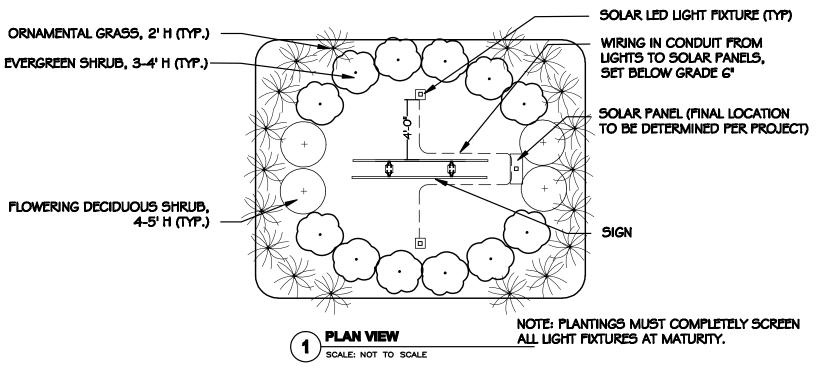
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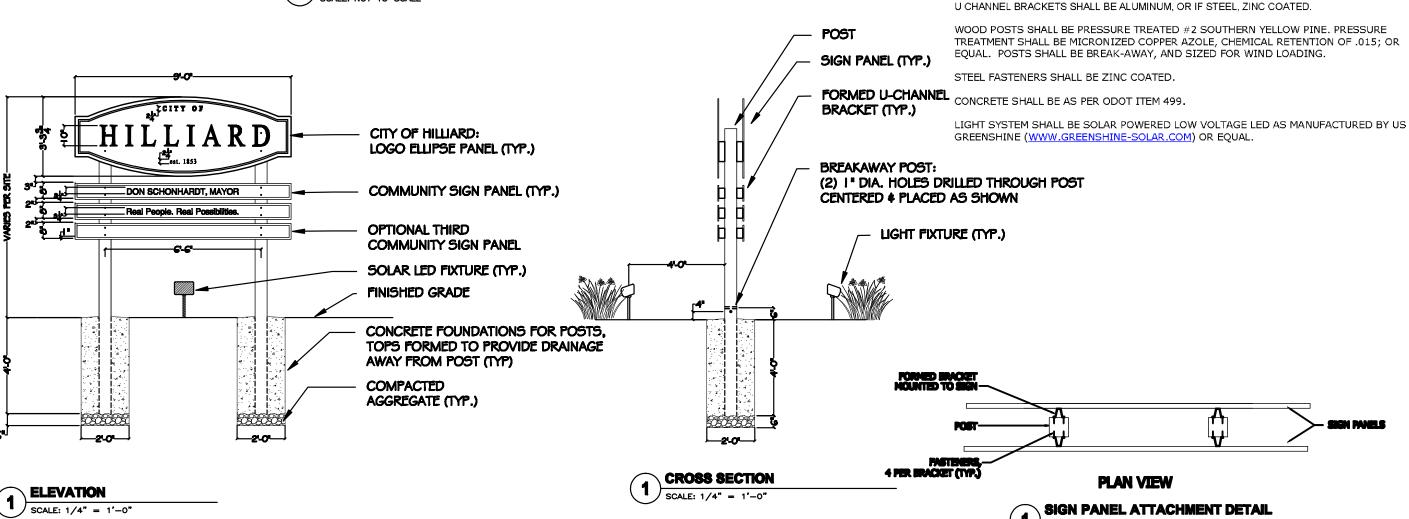
SIGN PANEL ATTACHMENT DETAIL

SCALE: NOT TO SCALE

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GENERAL NOTES

APPROVAL OF CITY ENGINEER.

THE SIGN. SIZE AS NOTED ON DETAILS.

BACKGROUND COLOR.

MATERIALS

SHALL BE REFLECTIVE 3M-PRODUCT 680-10 OR EQUAL.

CENTERED IN THE SIGN. SIZE AS NOTED ON DETAILS.

SCALE: NOT TO SCALE

SIGN PANELS SHALL BE OF HEIGHT AND LENGTH AS SHOWN ON DRAWINGS. THE HEIGHT TO WIDTH RATIO OF THE HILLIARD ELLIPSE SIGN PANEL SHALL BE 1 TO 2.73.

ALL COMPONENTS & SURFACES SHALL BE SPRAY PAINTED WITH POLYURETHANE PRIME

SIGN PANELS, PANEL BRACES, AND POSTS SHALL BE PANTONE COLOR 294 BLUE (HILLIARD BLUE) IF PAINTED, OR PAINT CODE 480-G5 IF POWDER COATED. SIGNS LOCATED IN OLD HILLIARD SHALL BE PAINTED OR POWDER COATED PPG MATHEWS BLACK, SUBJECT TO

SIGN PANELS SHALL HAVE WHITE VINYL LETTERS AND WHITE VINYL TRIM BAND. WHITE VINYL

LETTERING ON HILLIARD COMMUNITY SIGN PANELS SHALL BE PURITAN 2.0 AND CENTERED IN

PROVIDE SHOP DRAWINGS TO HILLIARD SERVICE DIRECTOR FOR REVIEW AND APPROVAL.

LETTERING ON THE HILLIARD ELLIPSE SIGNS SHALL BE TIMES NEW ROMAN REGULAR AND

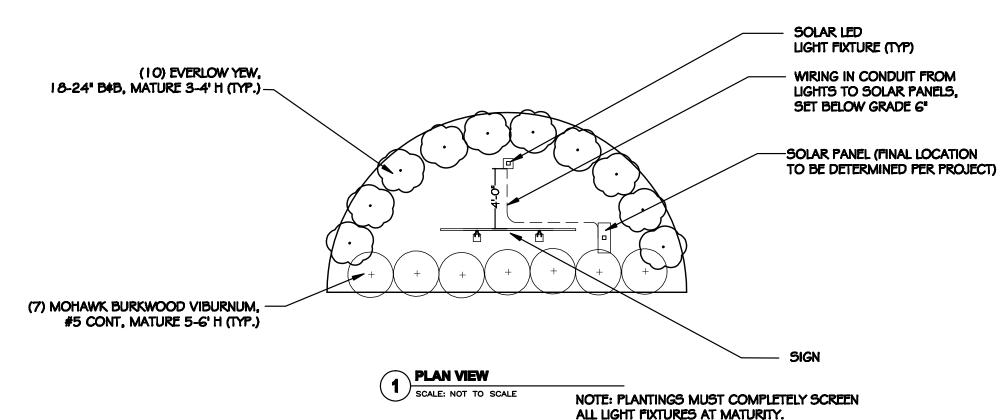
ALL EXPOSED FASTENERS SHALL BE PAINTED HILLIARD BLUE OR WHITE TO MATCH

SIGN PANELS SHALL BE ALUMINUM WITH MAXIMUM .090 FLAT SURFACE VARIATION.

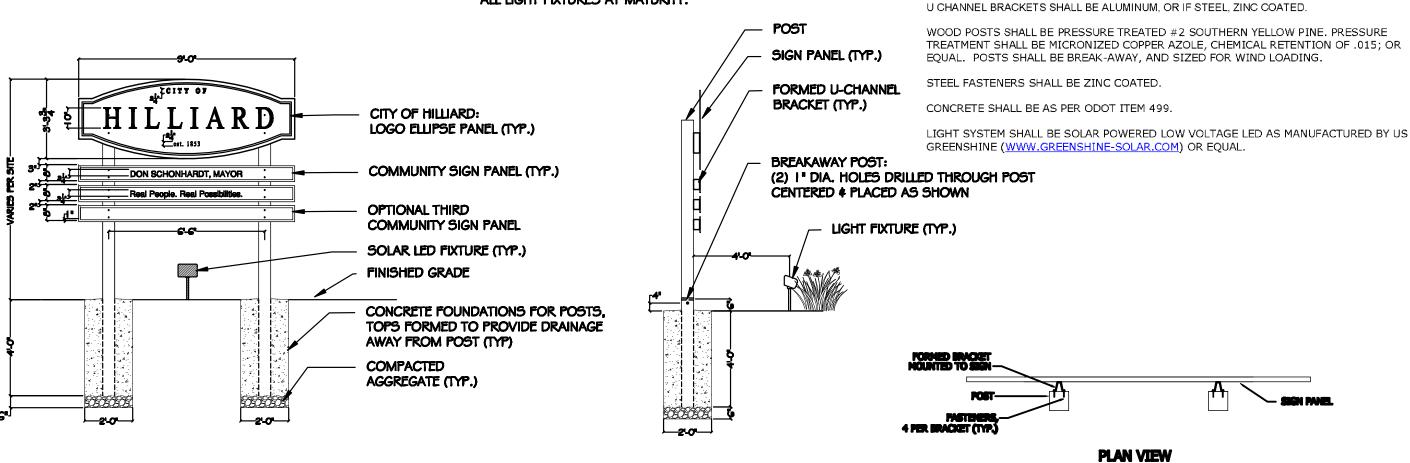
SIGN PANELS BRACES SHALL BE SQUARE ALUMINUM TUBE WELDED TO SIGN PANEL.

COAT FOLLOWED BY POLYURETHANE COLOR COAT, OR POWDER COATED.

date: minimus ahast:



ELEVATION



GENERAL NOTES

APPROVAL OF CITY ENGINEER.

THE SIGN. SIZE AS NOTED ON DETAILS.

BACKGROUND COLOR.

MATERIALS

SHALL BE REFLECTIVE 3M-PRODUCT 680-10 OR EQUAL

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ALL EXPOSED FASTENERS SHALL BE PAINTED HILLIARD BLUE OR WHITE TO MATCH

SIGN PANELS SHALL BE ALUMINUM WITH MAXIMUM .090 FLAT SURFACE VARIATION.

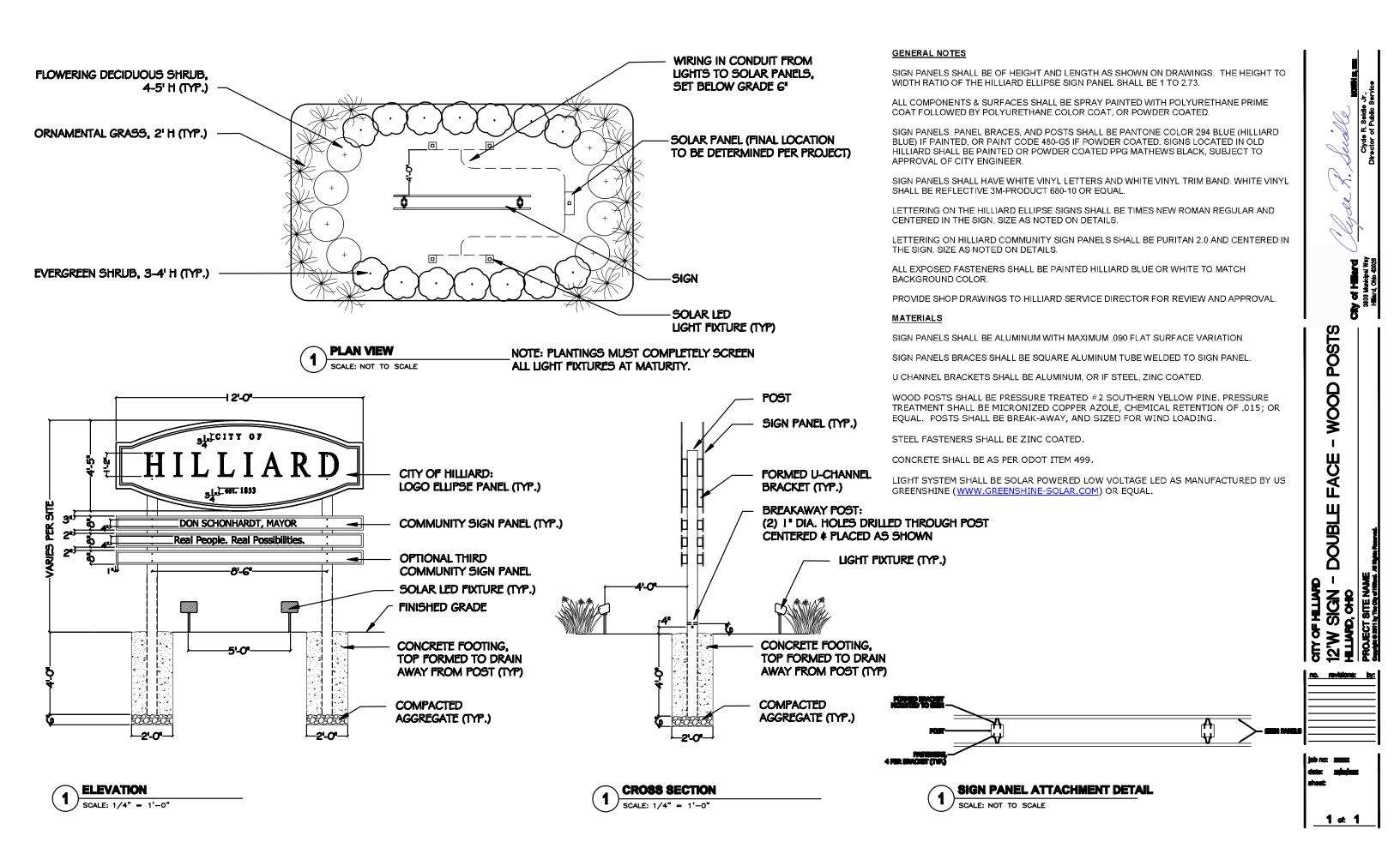
SIGN PANELS BRACES SHALL BE SQUARE ALUMINUM TUBE WELDED TO SIGN PANEL.

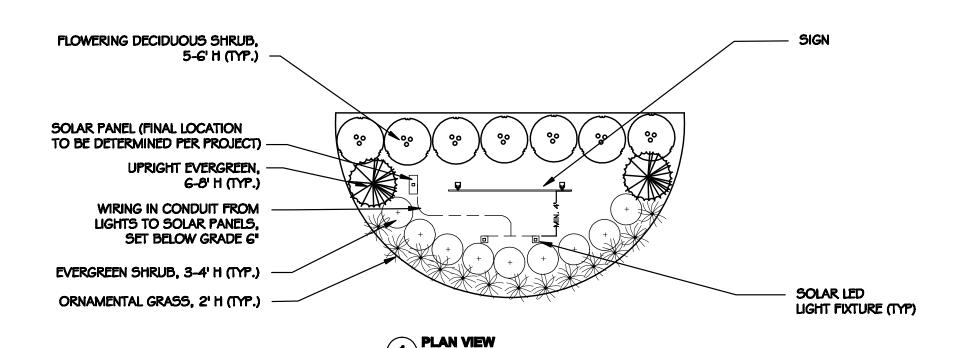
SIGN PANEL ATTACHMENT DETAIL

SCALE: NOT TO SCALE

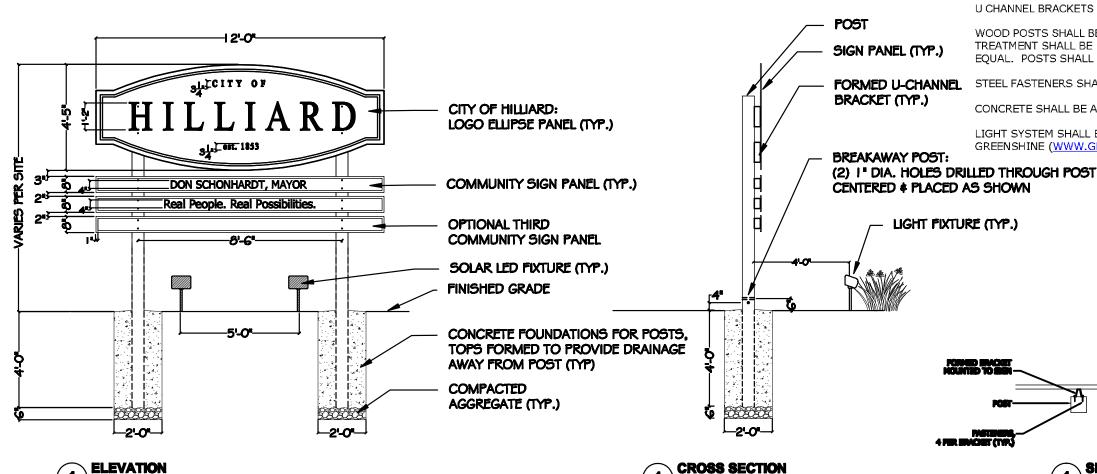
WIDTH RATIO OF THE HILLIARD ELLIPSE SIGN PANEL SHALL BE 1 TO 2.73.

COAT FOLLOWED BY POLYURETHANE COLOR COAT, OR POWDER COATED.





SCALE: NOT TO SCALE



GENERAL NOTES

SIGN PANELS SHALL BE OF HEIGHT AND LENGTH AS SHOWN ON DRAWINGS. THE HEIGHT TO WIDTH RATIO OF THE HILLIARD ELLIPSE SIGN PANEL SHALL BE 1 TO 2.73.

ALL COMPONENTS & SURFACES SHALL BE SPRAY PAINTED WITH POLYURETHANE PRIME COAT FOLLOWED BY POLYURETHANE COLOR COAT, OR POWDER COATED.

SIGN PANELS, PANEL BRACES, AND POSTS SHALL BE PANTONE COLOR 294 BLUE (HILLIARD BLUE) IF PAINTED, OR PAINT CODE 480-G5 IF POWDER COATED. SIGNS LOCATED IN OLD HILLIÁRD SHALL BE PAINTED OR POWDER COATED PPG MATHEWS BLACK, SUBJECT TO APPROVAL OF CITY ENGINEER.

SIGN PANELS SHALL HAVE WHITE VINYL LETTERS AND WHITE VINYL TRIM BAND, WHITE VINYL SHALL BE REFLECTIVE 3M-PRODUCT 680-10 OR EQUAL.

LETTERING ON THE HILLIARD ELLIPSE SIGNS SHALL BE TIMES NEW ROMAN REGULAR AND CENTERED IN THE SIGN. SIZE AS NOTED ON DETAILS.

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PROVIDE SHOP DRAWINGS TO HILLIARD SERVICE DIRECTOR FOR REVIEW AND APPROVAL.

MATERIALS

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SIGN PANELS BRACES SHALL BE SQUARE ALUMINUM TUBE WELDED TO SIGN PANEL.

U CHANNEL BRACKETS SHALL BE ALUMINUM, OR IF STEEL, ZINC COATED.

WOOD POSTS SHALL BE PRESSURE TREATED #2 SOUTHERN YELLOW PINE. PRESSURE TREATMENT SHALL BE MICRONIZED COPPER AZOLE, CHEMICAL RETENTION OF .015; OR EQUAL. POSTS SHALL BE BREAK-AWAY, AND SIZED FOR WIND LOADING.

STEEL FASTENERS SHALL BE ZINC COATED.

CONCRETE SHALL BE AS PER ODOT ITEM 499.

LIGHT SYSTEM SHALL BE SOLAR POWERED LOW VOLTAGE LED AS MANUFACTURED BY US GREENSHINE (WWW.GREENSHINE-SOLAR.COM) OR EQUAL.

LIGHT FIXTURE (TYP.)

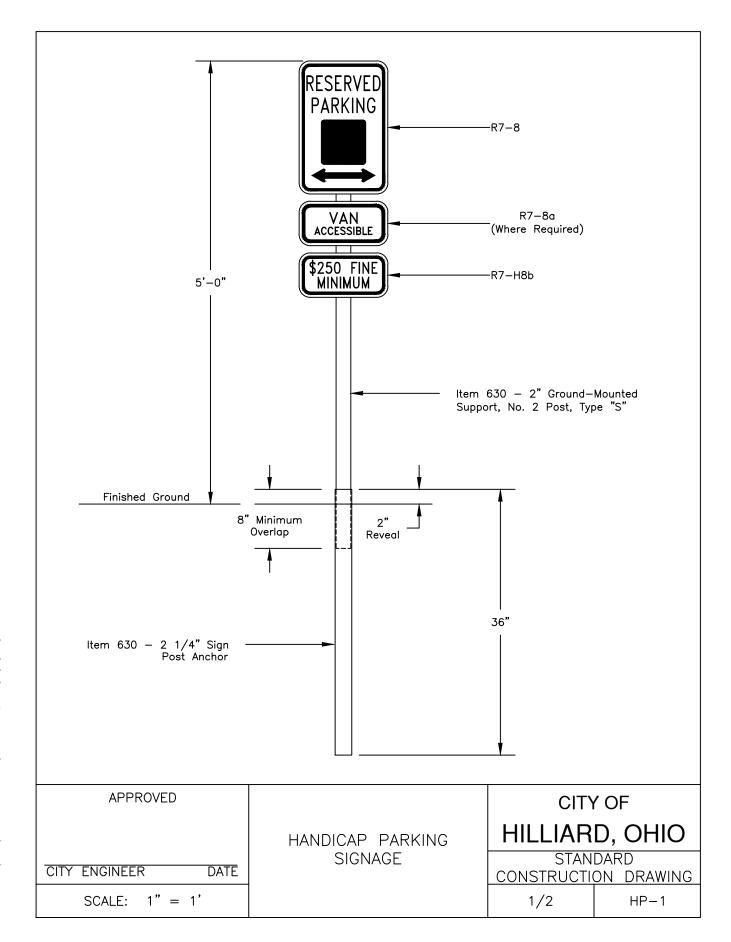
SCALE: 1/4" = 1'-0"

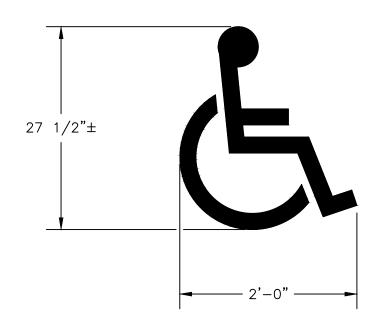
NOTE: PLANTINGS MUST COMPLETELY SCREEN

ALL LIGHT FIXTURES AT MATURITY.

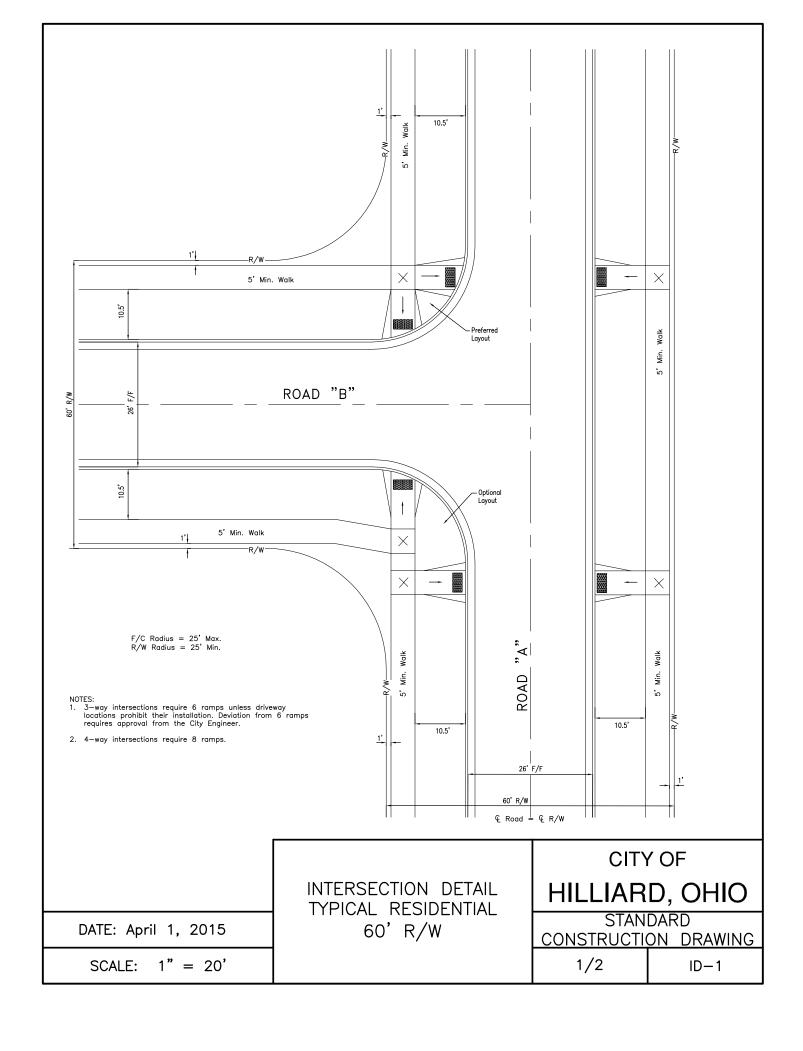
SIGN PANEL ATTACHMENT DETAIL

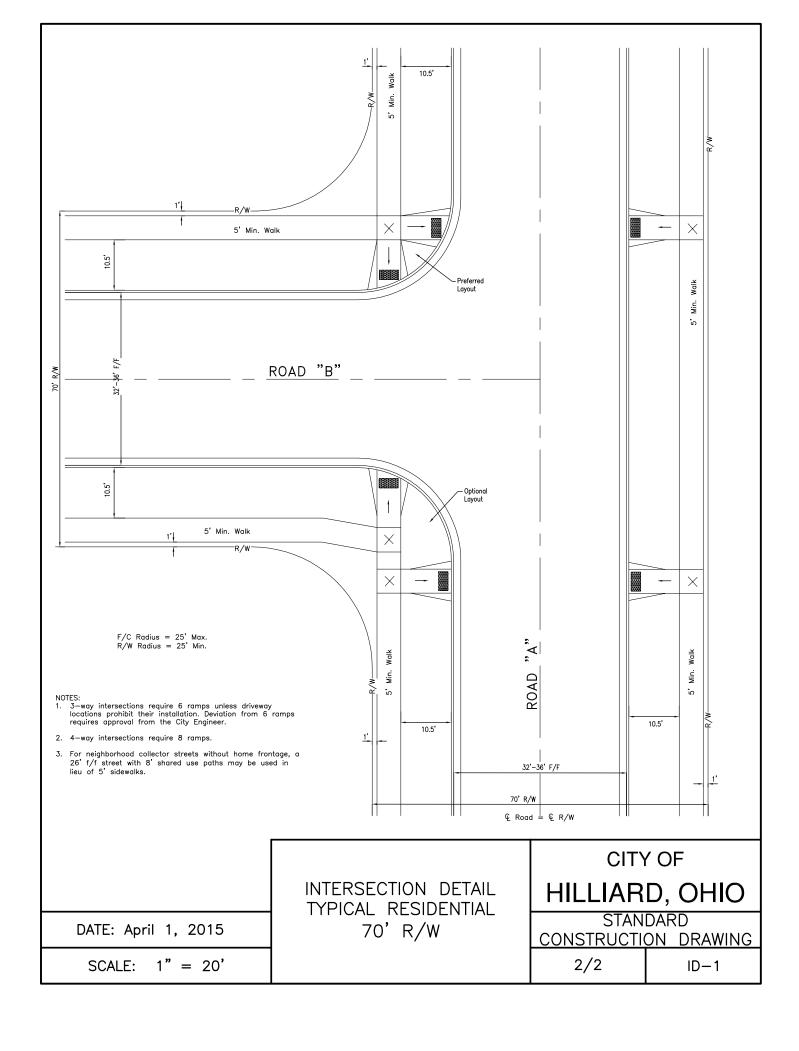
SCALE: NOT TO SCALE

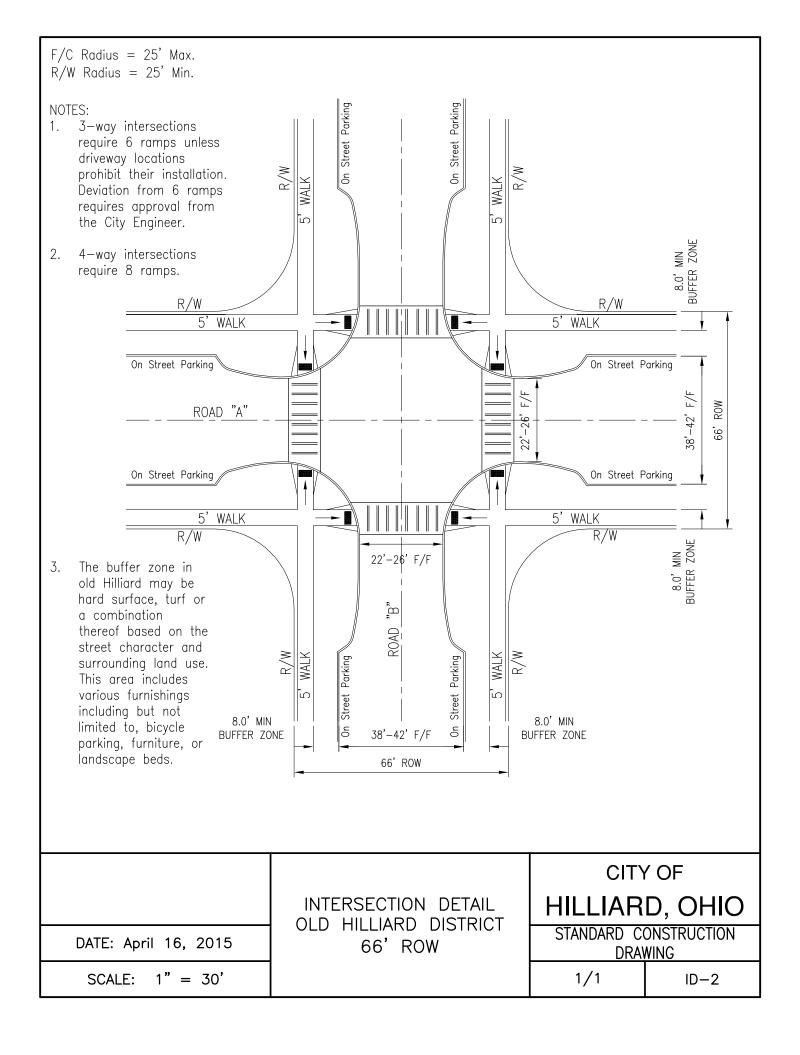


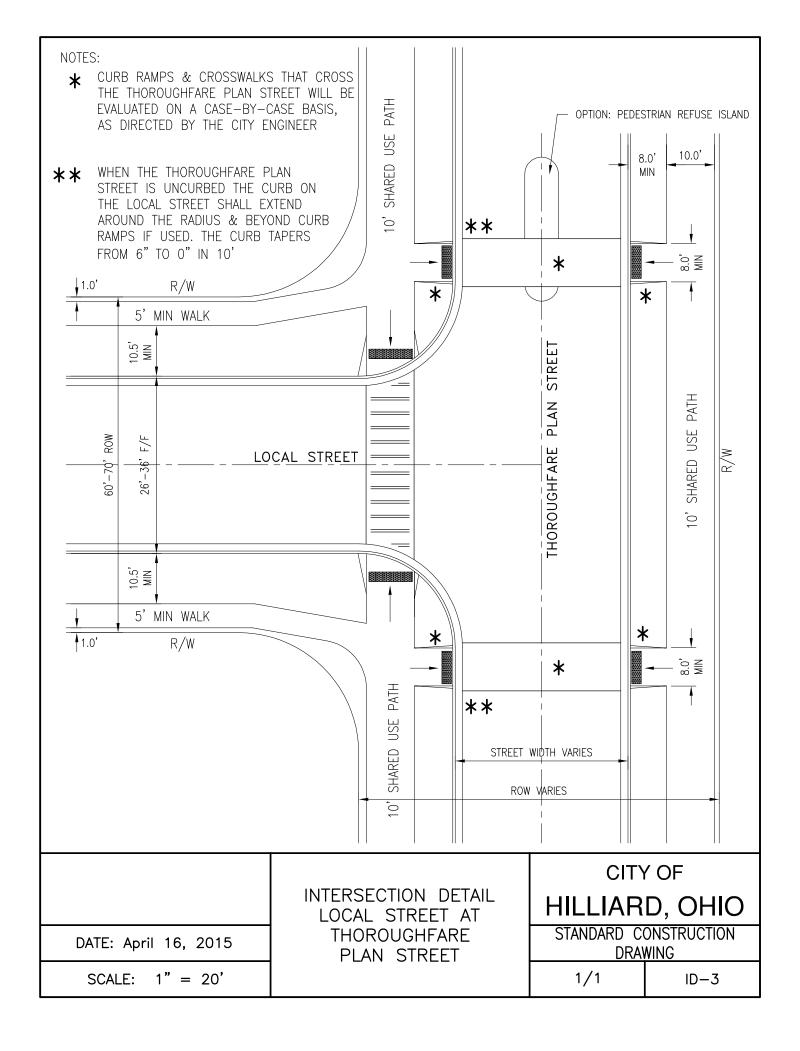


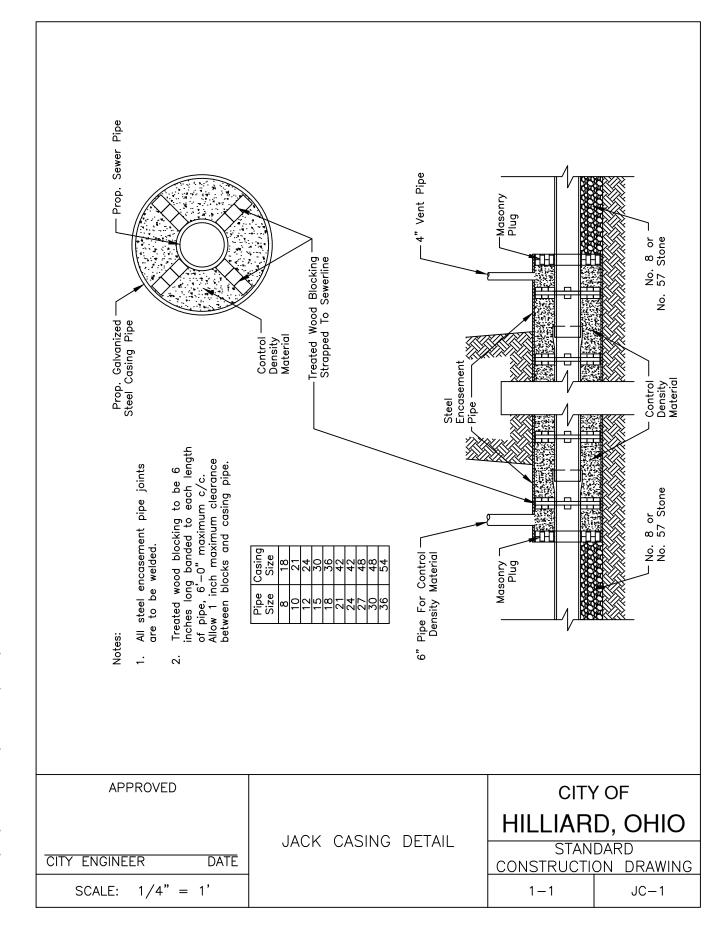
APPROVED		CITY	/ OF
	HANDICAP PARKING	HILLIAR	D, OHIO
CITY ENGINEER DATE	SIGNAGE		DARD ON DRAWING
SCALE: 1" = 1'		2/2	HP-1

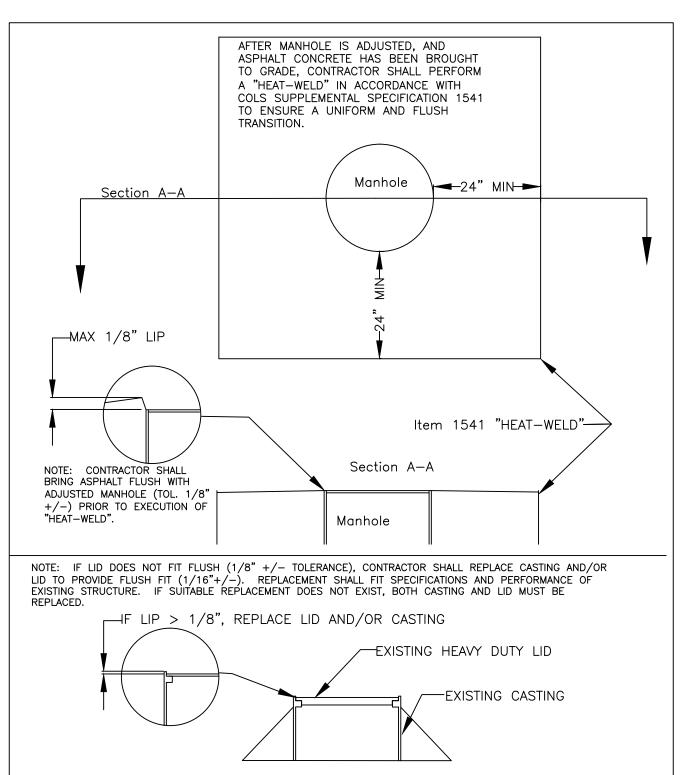




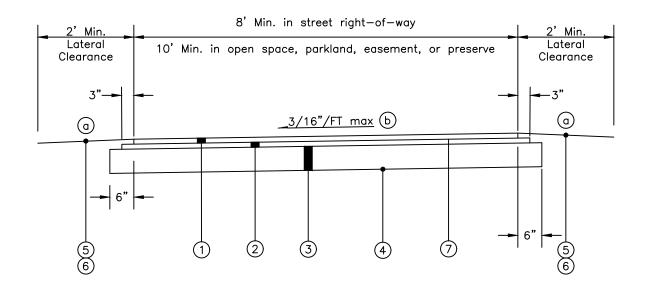






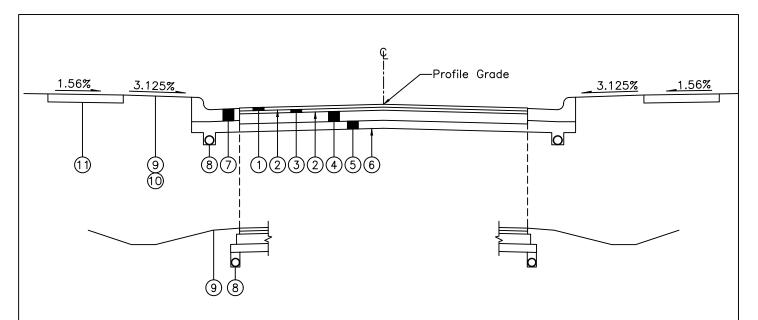


APPROVED		CIT	/ OF
	MANHOLE ADJUSTED	HILLIAR	D, OHIO
CITY ENGINEER DATE	TO GRADE		DARD ON DRAWING
NOT TO SCALE		1/1	MHA-1



- 1 Item 448 1 1/2" Asphalt Concrete, Surface Course, Type I, PG64-22, Medium Traffic
- (2) Item 448 2 1/2" Asphalt Concrete*, Intermediate Course, Type 2, PG64-22, Medium Traffic
- (3) Item 304 6" Aggregate Base
- (4) Item 204 Subgrade Compaction
- (5) Item 659 Seeding & Mulching, As Per Plan
- (6) Item 653 3" Min pulverized topsoil, furnished & placed, As Per Plan or approved equal
- (7) Item 407 Tack coat, type and rate as directed by the engineer. May be omitted if surface course is applied immediately following intermediate course of asphalt
- a Side slopes per typical section of plan
 - All seeding/mulching and topsoil shall be free of weeds to ensure quality growth of grass
- (b) For multi—use paths, 12' in width or greater, consideration should be given to provide a center crown
 - * Note: Asphalt concrete intermediate course may be reduced to 1½" min. in locations where utility, maintenance, or construction vehicle use of the path is expected to be minimal. City Engineer approval is required for this reduction.

		CIT	/ OF
	 MULTI-USE PATH DETAILS	HILLIAR	D, OHIO
DATE: September 13, 2018	MULII-USE PAIR DETAILS		DARD ON DRAWING
SCALE: 1" = 2'		1/1	MP-1



- (1) Item 441 Asphalt Concrete, Surface Course, Type 1, PG64-22 (448)
- (2) Item 407 Non—Tracking Tack Coat
- (3) Item 441 Asphalt Concrete, Intermediate Course, Type 2, PG64—22 (448)
- 4) Item 301 Asphalt Concrete Base, PG64—22
- (5) Item 304 Aggregate Base
- (6) Item 204 Subgrade Compaction
- (7) Item 609 Combination Curb and Gutter (Per City of Hilliard STD DWG. CG-1)
- (8) Item 605 4" Pipe Underdrain
- (9) Item 659 Seeding and Mulching, As Per Plan
- (10) Item 652 3" Topsoil Furnished and Placed
- (11) Item 608 4" Concrete Walk (Per City of Hilliard STD DWG. SW—1)

Pavement Thickness (inches)			
ltem	Local/ Residential	Network Collector/ Commercial Mixed Use	Major & Minor Arterial
441- Surface	1.5"	1.5"	1.5"
441- Intermediate	2.5"	1.5"	1.5"
301 - Asphalt Base 4" 6"		9"	
304 - Aggregate	6"	6"	6"

DATE: March 06, 2023

SCALE: $\frac{1}{4}$ " = 1"

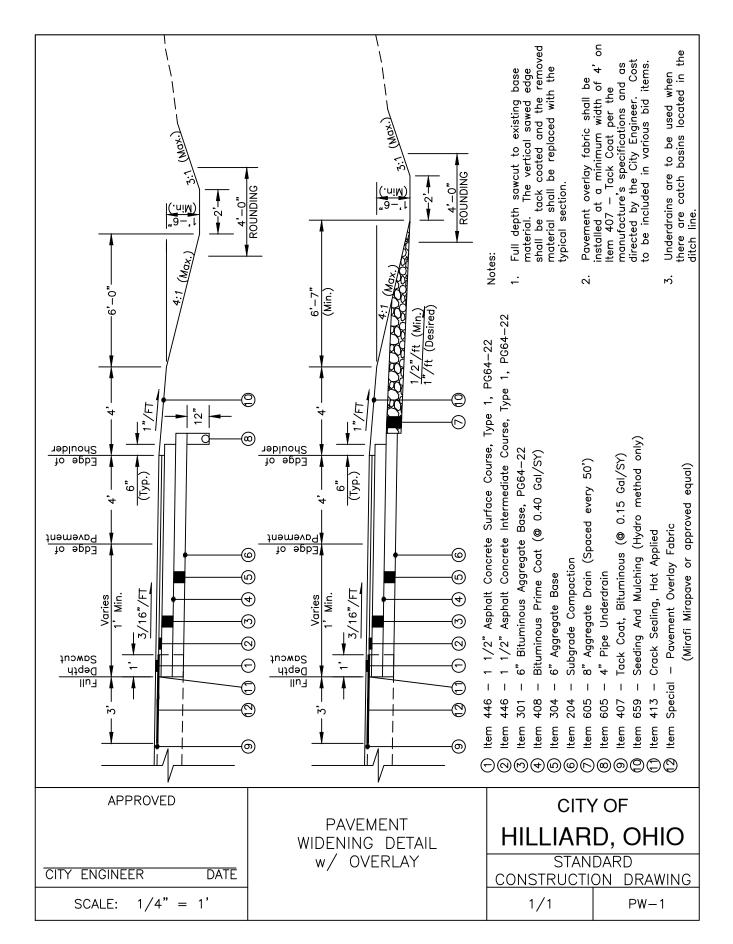
PAVEMENT THICKNESS

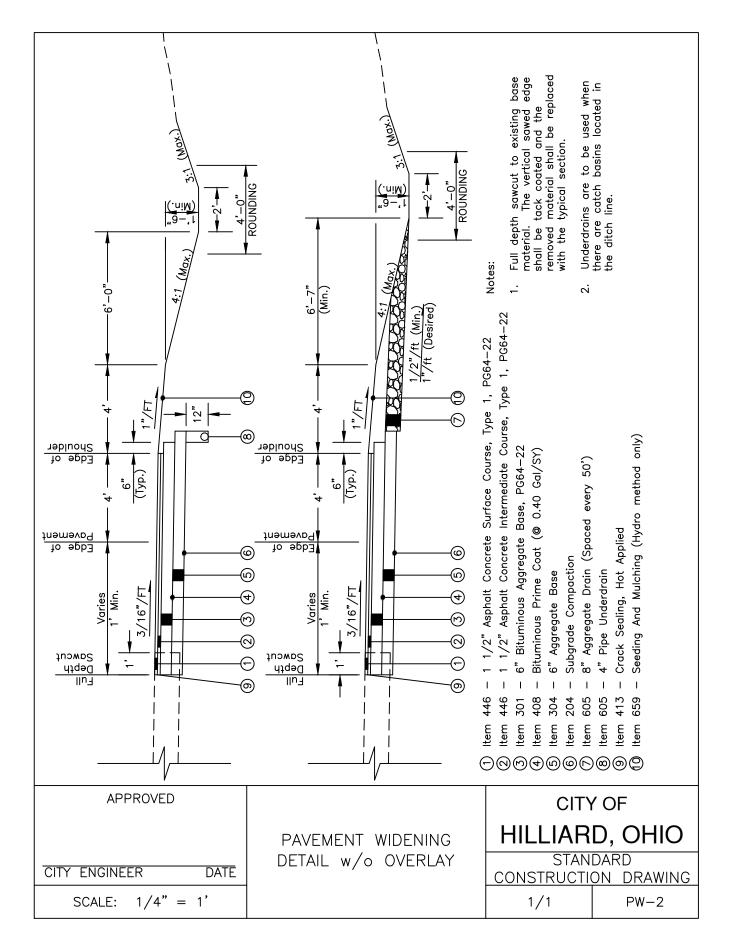
CURBED AND UNCURBED STREETS

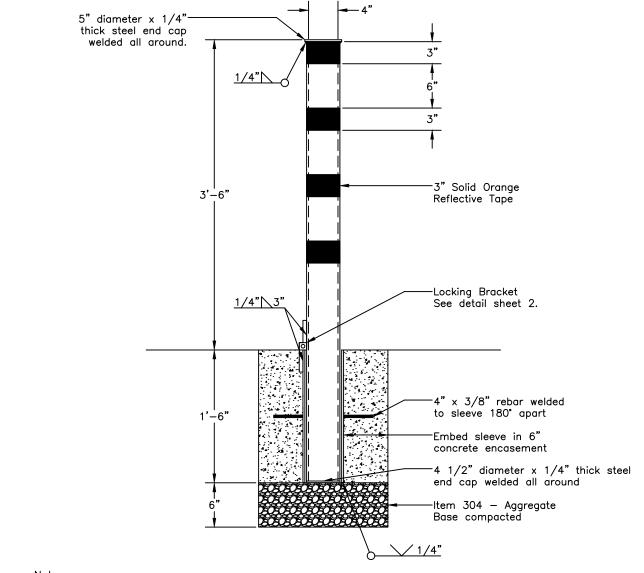
CITY OF HILLIARD, OHIO

STANDARD
CONSTRUCTION DRAWING

1/1 | PV-1

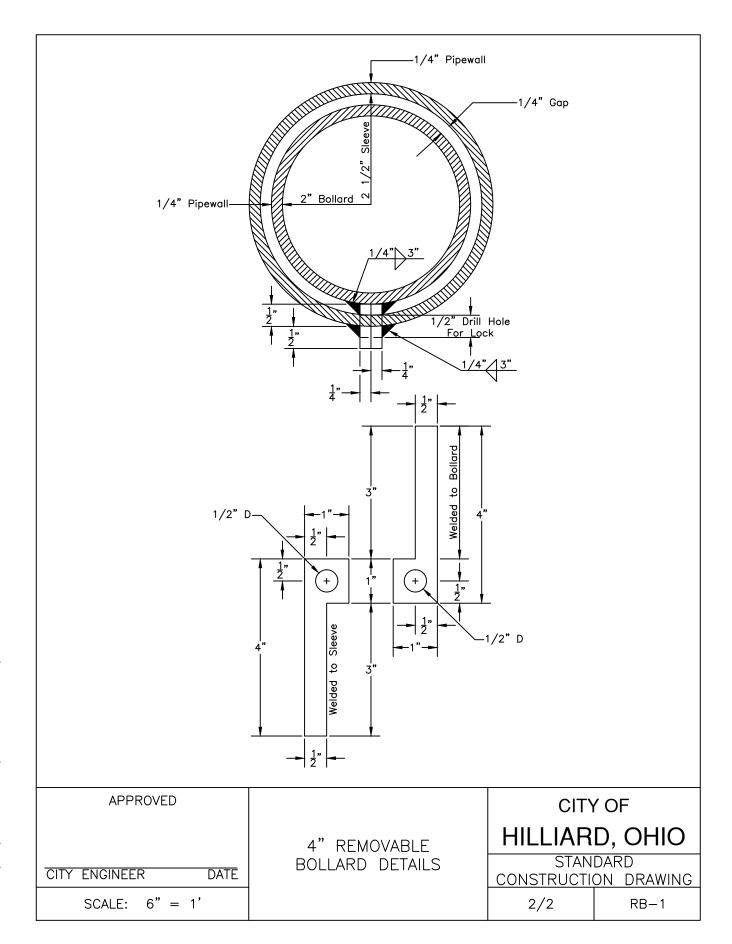


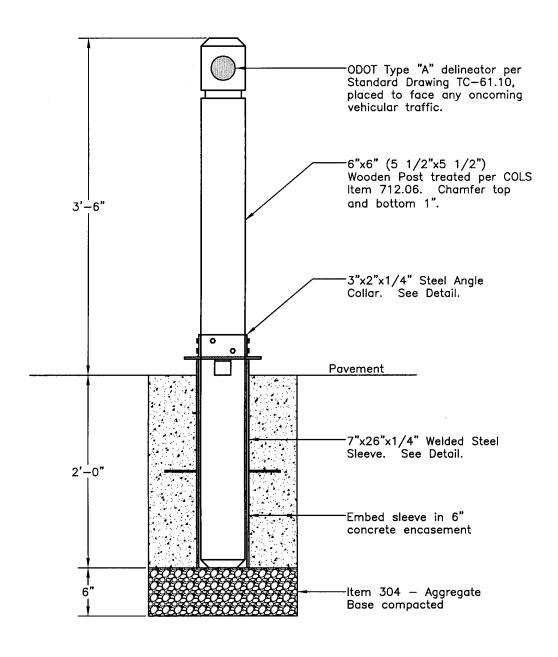




- 1. Bollards shall be 4" I.D. Schedule 40 black steel pipe with end caps and locking bracket welded in place. Paint with 2 coats of Rust—Oleum No. 769 Damp Proof Red Primer or equal, and 2 coats of flat white paint for metal, in an exterior application. Apply 3" wide solid orange reflective tape spaced 6" apart.
- 2. Sleeve shall be 5" I.D. Schedule 40 black steel pipe with locking bracket welded in place. Paint with 2 coats of Rust-Oleum No. 769 Damp Proof Red Primer or equal.
- 3. The City of Hilliard shall supply all locks.

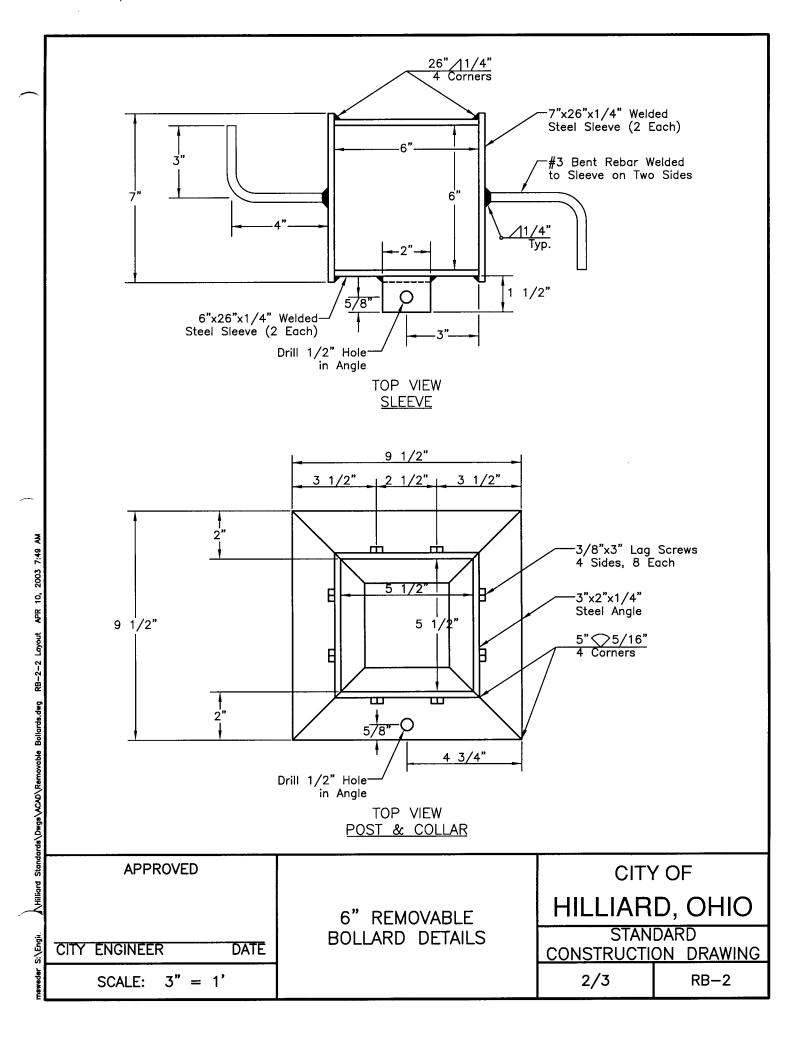
APPROVED		CITY	/ OF
	4"REMOVABLE	HILLIAR	D, OHIO
CITY ENGINEER DATE	BOLLARD		DARD ON DRAWING
SCALE: 1" = 1'		1/2	RB-1

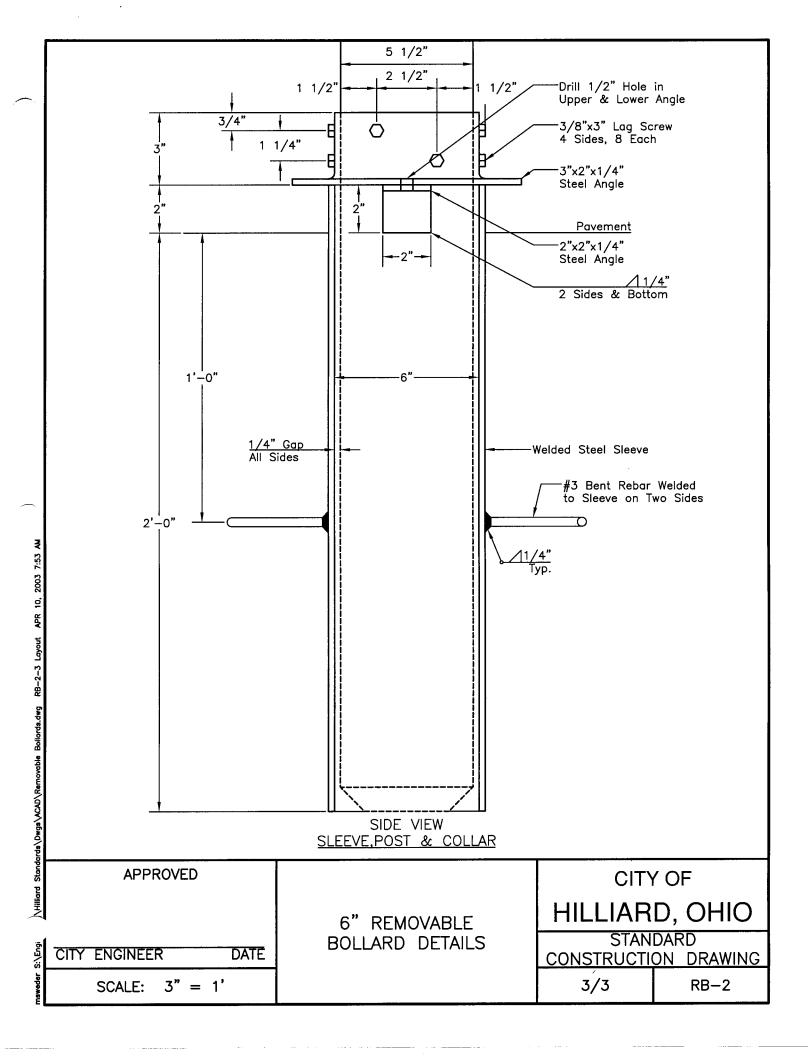


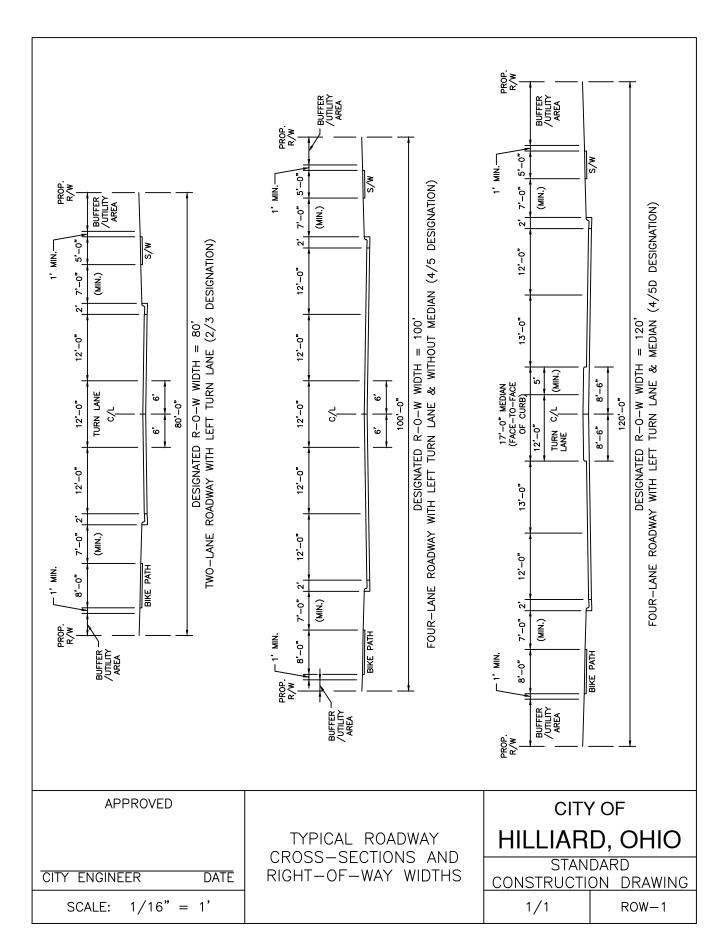


- 1. Steel sleeve and collar to be painted with 2 coats of Rust-Oleum No. 769 Damp Proof Red Primer or equal. Collar to be painted with 2 coats of flat black, suitable for metal in an exterior application.
- 2. The City of Hilliard shall supply all locks.

APPROVED		CITY	Y OF
	6" REMOVABLE	HILLIAR	D, OHIO
	BOLLARD	STAN	DARD
CITY ENGINEER DATE	BOLDAND		ON DRAWING







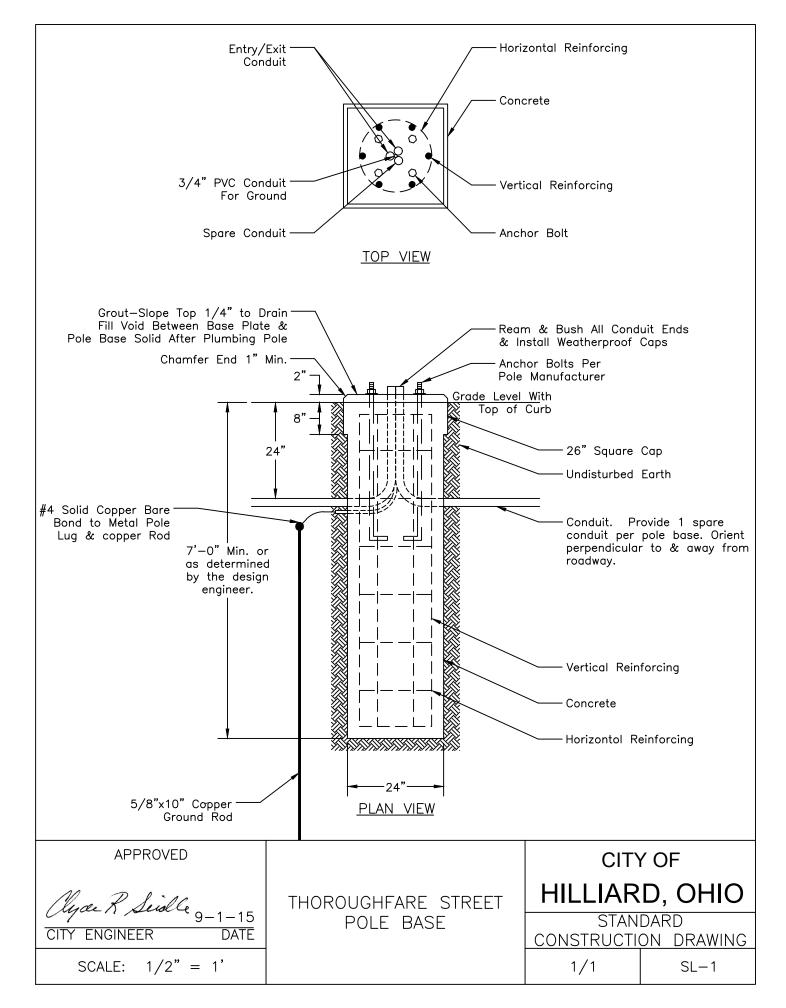
5:\Public Service - Engineering\Hilliard Standards\Drawings\ACAD\Record Plat.dwg, 4/25/2013 10:09:26 AM

- 1. <u>General.</u> The final plat shall have incorporated all changes or modifications required by the City Planning and Zoning Commission and City Engineer. Otherwise, the final plat shall conform to the preliminary plat, and it may constitute only that portion of the approved preliminary plat which the subdivider proposed to record or develop at the time, provided that such portion conforms with all requirements of these regulations.
- 2. Preparation. The final plat shall be prepared by a registered surveyor.
- 3. <u>Form.</u> The final plat shall be clearly and legibly drawn in black ink on mylar or other materials approved by the City Engineer. The size of the plat shall be on one or more sheets twenty—two by thirty—four inches (22"x34"). Scale shall be one inch equals fifty feet (1"=50'). If more than two sheets are required, an index sheet shall be filed showing the entire subdivision on one sheet with all areas shown on other sheets indicated thereon.
- 4. Plat Contents. The final plat shall contain the following information:
 - A. Name of subdivision, location, date, north point, graphic and numerical scale, background map at a scale of one inch equals two hundred feet (1"=200'), and total acreage. The north point shall be indicated on each sheet of a plat.
 - B. All plat boundaries with bearings in the clockwise direction and length of course in feet and hundredths. Boundary survey shall meet requirements of Ohio Administrative Code, Chapter 4733.37 and the County Engineer.
 - C. Bearings and distances to the nearest established street lines or recognized permanent survey monuments shall be accurately described on the plat.
 - D. Lines of adjoining streets and alleys with their widths and names plus building setback lines.
 - E. The radii, chords and chord bearings, points of tangency, and general angles for all curvilinear streets and radii for rounded corners.
 - F. All easements and right—of—way provided for public services or utilities, and any limitations of such right—of—way or easements.
 - G. All lot numbers and lines, with accurate dimensions in feet and hundredths, and with bearings. The basis of bearings shall be stated on the plat. The acreage of all lots over one (1) acre in size shall be indicated.
 - H. Accurate location and description of all monuments.
 - I. Name of the subdivider and the registered surveyor who prepared the final plat.
 - J. Accurate outlines of any areas to be dedicated or temporarily reserved for public use with the purpose indicated thereon.
 - K. Certification by a registered surveyor to the effect that the plat represents a survey made by him and that all monuments shown thereon actually exist and that their location is correctly shown.
 - L. An acknowledgment by the owner or owners of his/her, or their adoption of the plat, the dedication of streets and other public areas, and granting easements.
 - M. Vicinity map of area within one-half (1/2) mile radius.

APPROVED		CITY	/ OF
	RECORD PLAT	HILLIAR	D, OHIO
CITY ENGINEER DATE	GUIDLINES		DARD ON DRAWING
SCALE: NTS		1/1	RP-1

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, 4/25/2013
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4CAD\Record
4s\DrawingsV
d Standard
- Engineering\Hilliar
S:\Public Service

SITUATED IN THE STATE OF OHIO, COUNTY OF ACRES	FRANKLIN, CITY OF HILLIARD, BEING PART OF VIRGINIA M	ILITARY SURVEY NUMBER, CONTAINING
	NY, TRUSTEE, BY JOHN A. DOE, PRESIDENT, DULY AUTHOR	RIZED IN THE PREMISES DOES HEREBY
	NIS IIS, AND DOES HEREBY ACCEPT THIS PLAT OF	SAME AND DEDICATE TO PUBLIC USE, AS
EASEMENTS ARE GRANTED TO THE CITY OF HIL OPERATION, AND MAINTENANCE OF ALL PUBLIC AND WHERE NECESSARY FOR THE CONSTRUCTI	LIARD, ITS SUCCESSORS, AND ASSIGNS WHERE INDICATED AND PRIVATE UTILITIES, INCLUDING CABLE TV, ABOVE AN ON, OPERATION, AND MAINTENANCE OF SERVICE CONNECT S AND STRUCTURES WITH A FOUNDATION, OR OF A PERM	ON THE PLAT FOR THE CONSTRUCTION, D BENEATH THE SURFACE OF THE GROUND, IONS TO ALL ADJACENT LOTS AND LANDS,
	PLATTED AREA ARE WITHIN THOSE TRACTS OF LANDS OW AND PURPOSES STATED IN THE PRECEDING EASEMENTS P.	
THAT GRANTORS WILL INDEMNIFY THE CITY OF	RESENTATIVES OF THE DEVELOPER DEDICATING THE PROPE HILLIARD FOR, AND HOLD IT HARMLESS FROM ANY AGRIC ATED HEREIN, WHICH RESULT FROM GRANTORS CONVERSI	ULTURAL RECOUPMENTS ASSESSED OR LEVIED
IN WITNESS WHEREOF ABC DEVELOPMENT COM, 20	PANY, TRUSTEE, BY JOHN A. DOE, PRESIDENT, HAS EXEC	UTED THIS PLAT THIS DAY OF
SIGNED AND ACKNOWLEDGED IN THE PRESENCE OF:	ABC DEVELOPMENT COMPANY, TRUSTI	EE
PRINTED:	JOHN A. DOE, PRESIDENT	
PRINTED:		
BEFORE ME, A NOTARY PUBLIC IN AND FOR TO COMPANY, TRUSTEE, WHO ACKNOWLEDGED THE	HE SAID STATE, PERSONALLY APPEARED <u>JOHN A. DOE, PE</u> SIGNING OF THE FOREGOING INSTRUMENT TO BE HIS FR	EE AND VOLUNTARY ACT AND DEED, AND THE
) <u>ABC_DEVELOPMENT_COMPANY</u> , <u>TRUSTEE</u> , FOR THE USE A MY HAND AND AFFIXED MY OFFICIAL SEAL THIS DAY	
MY COMMISSION EXPIRES	WI THAT ARE ATTACK WIT STITUTE SEAL THIS BAT	o,, 20
	NOTARY PUBLIC, STATE OF OHIO	
CITY OF HILLIARD		
APPROVED THIS DAY OF,	20	
BY THE PLANNING AND ZONING COMMISSION	CHAIRMAN, PLANNING AND ZONING C	OMMISSION HILLIARD OHIO
APPROVED THIS DAY OF,	·	OMMISSION, HILLIARD, OHIO
	CITY ENGINEER, HILLIARD, OHIO	
APPROVED AND ACCEPTED THIS DAY OF HEREON, AND THE EASEMENTS AS GRANTED HI	, 20 BY RESOLUTION NO, WI EREON ARE ACCEPTED AS SUCH BY THE COUNCIL OF THI	HEREIN THE, AS DEDICATED E CITY OF HILLIARD, OHIO.
MAYOR, HILLIARD, OHIO TRANSFERRED THIS DAY OF	CLERK OF COUNCIL, HILLIARD, OHK	
	AUDITOR, FRANKLIN COUNTY, OHIO	
FILED FOR RECORD THIS DAY OF FEE FILE NO	, 20 AT:M.	
RECORDED THIS DAY OF,	RECORDER, FRANKLIN COUNTY, OHIO 20 PLAT BOOK PAGE	
	DEPUTY RECORDER, FRANKLIN COUNT	Y, OHIO
APPROVED		CITY OF
	RECORD PLAT	HILLIARD, OHIO
ITY ENGINEER DATE	DEDICATION TEXT	STANDARD CONSTRUCTION DRAWING
SCALE: NTS		1/1 RP-2



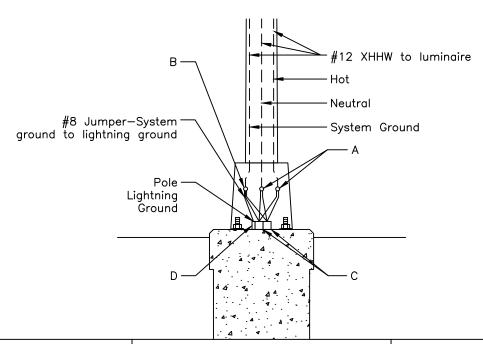
5.Public Service - Engineering/Hilliard Standards/Drawings\ACAD\Street Lighting 9-1-15.dwg, 9/18/2015 7:10:47 AM

Notes:

- 1. Transformer Base: Provide a one-piece cast aluminum alloy
- 2. Grounding: Each transformer base shall contain an internal lug with drilled hole for attaching a ground conductor.
- 3. Nameplate: Stainless steel, screw attached, provide permanent weather resistant engraved Lamicoid nameplate 3" square minimum 3/4" helvetica white letters on a dark bronz background with pole number, circuit and station embossed into it per plan schedule. To be installed on the base door.

4. Connections:

- A. Fused Inline Y connector kit type II with waterproof boots and breakaway receptable. Fuse at 10 Amps, Homac FYU—M and DYU—M, Buss KTK—10 fuse or approved interchangeable equal.
- B. Unfused Inline Y connector kit type III flood seals with waterproof boots and breakaway receptacle, Homac DY series.
- C. Provide molded plastic or rubber capping device that only permits wire pass through while preventing dirt, water, etc. entry.
- D. Pole lighting ground lug uninsulated copper compression terminal UL listed for 600V. Size for wire specified. Drill, tap, and bolt to transformer base Burndy YA series. Bond system ground to lightning rod ground.
- E. Deliver transformer to city.
- 5. Provide 2' service loop in all wiring to bring connectors and fuse holders out thru handhole.



APPROVED

City ENGINEER DATE

SCALE: 1/2" = 1'

THOROUGHFARE STREET TRANSFORMER BASE WIRING DETAIL CITY OF HILLIARD, OHIO

STANDARD

CONSTRUCTION DRAWING

1/1

5./Public Service - Engineering/Hilliard Standards/Drawings/ACAD/Street Lighting 9-1-15.dwg, 9/18/2015 7:11:08

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Notes:

- General Description: Aluminum round tapered anchor base with finish: A dark bronze approved by the City Engineer. The paint shall be a powder paint finished to a gloss of 35% (at 60 degrees) spun aluminum finish with pole cap, transformer base, base cover and bolt covers.
- Pole Cap: Provide an ornamental aluminum alloy cap fastened via stainless steel screws.
- Pole Damper: Provide a second mode vibration damper attached to midpoint via welding. Locate inside pole. Factory installed.
- Base Flange: Provide a one piece cast socket of aluminum alloy 356-T6. The flange shall be joined to the shaft by means of continuous weld externally and internally.
- Base Cover: Provide bolt covers of aluminum alloy 43 and stainless steel screws for attachment.
- Miscellaneous Hardware: All nuts, bolts, and washers used in the fabrication of the pole shall be grade 18-8 stainless steel except for anchorage hardware.
- Wrapping: Each pole shaft shall be wrapped with protective material during shipping & remain wrapped until pole is to be erected. All parts shall be boxed and/or banded.
- Pole Shaft: The shaft shall be one piece seamless with a minimum wall thickness of 0.156 inches, round tapered tube of alloy 6063—T6 and shall be full—length tempered after welding on top
 - base flange to produce the T6 temper. The entire pole assembly shall be rated @ 80 mph with a 30% gust factor for on EPA. Minimum of 2.7 template cut for luminaire.
- Hand Hole Placement: The pole shall be orientated so that the hand hole is located on the sidewalk side of the pole away from traffic.
- Banner Arm Placement: The pole shall be orientated so that the banner arms are located on the curb side of the pole facing traffic.
- Flag Holder Placement: The pole shall be orientated so that the flag holder is located on the side of the pole away from traffic.
- Feston receptacle:
 - Box shall be welded to pole.
 - Pole shall be wired with 3-#12 THHN wires (green, black & white) from the feston to the transformer base. A 2' service loop shall be provided at transformer base. Service loop shall be coiled and taped.
 - A 2"x4" blank weatherproof cover shall be installed on the feston.

APPROVED

Uyan R Sidle 9-1-15 CITY ENGINEER

SCALE:

DATE

N/A

THOROUGHFARE STREET POLE

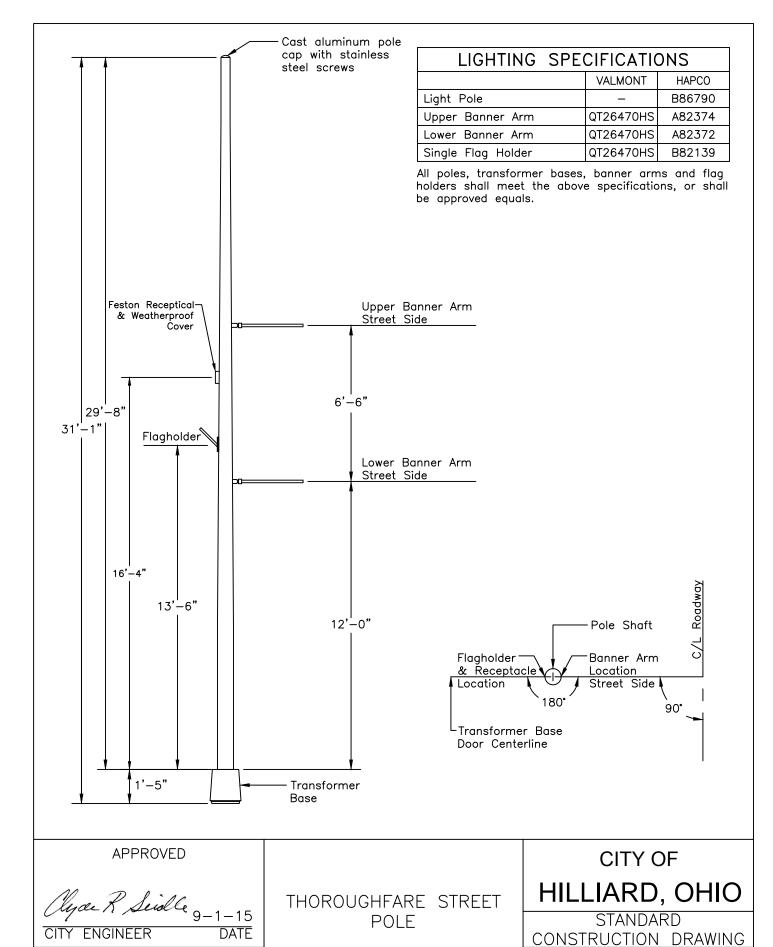
CITY OF HILLIARD, OHIO

STANDARD CONSTRUCTION DRAWING

1/2

1/4" = 1'

SCALE:



2/2

5:Public Service - Engineering/Hilliard Standards/Drawings/ACAD/Street Lighting 9-1-15.dwg, 9/18/2015 7:41:05 AM

Notes:

- 1. General Description: LED Roadway Fixture, 4000K color temperature.
- Housing: One piece die cast aluminum integral heat sink. Meet 2G vibration per ANSI C136.32-2001.
- Finish: Corrosion resistant polyester powder paint, minimum of 2.0 mil thick. Black or Dark Bronze.
- Mounting: Slipfitter with +/- 5 degree of adjustment for leveling. Adjustable for 1¼"-2" mounting pipe.
- 5. Labeling: UL listed for wet locations.
- 6. Distribution: Structured LED array optimized for roadway photometric distribution.
- 7. Approved Manufacturer: G.E. EANA LED Roadway Light, or approved equal.

*Voltage: 480V

8. Lamp: Rated L75 at 50,000 hours.

APPROVED

Olyan R Sisolle 9-1-15 CITY ENGINEER DATE

SCALE: N/A

THOROUGHFARE STREET LUMINAIRE

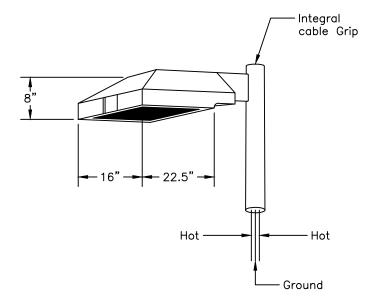
CITY OF HILLIARD, OHIO

STANDARD CONSTRUCTION DRAWING

1/2

5.1Public Service - Engineering/Hilliard Standards/Drawings/ACAD/Street Lighting 9-1-15.dwg, 9/18/2015 3:18:47 PM

- 9. Cable: Provide #12 THWN, stranded copper 600V, 90 degrees Celsius conductors. Wire to luminaire. Secure pole wiring with cable grip provided with luminaire. Provide adequate length to extend minimum 2 feet out of hand hole.
- Execution: All luminaires shall be plumb and level. Adjust lamp socket assembly to Type II or Type III cutoff. All lamps shall be operational prior to inspection. All surfaces shall be cleaned of dirt, debris, etc. free of scratches, dents, etc.
- 11. Method of Measurement: See City of Columbus specifications section 1000.19 or ODOT section 625.20.
- 12. Basis of Payment: See City of Columbus specifications section 1000.20 or ODOT section 625.21.



APPROVED

Olyan R Siisle 9-1-15 CITY ENGINEER DATE

SCALE: 1/2" = 1'

THOROUGHFARE STREET LUMINAIRE

CITY OF HILLIARD, OHIO

STANDARD CONSTRUCTION DRAWING

2/2

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Notes.

- 1. Coordination: Coordinate location of transformer and pad with power company.
- 2. Transformer: Provided, installed and wired by power company.
- 3. Transformer Pad: Install per power company requirements for size and location. Refer to service enclosure pad for material specifications.
- 4. Service Enclosure Pad: Structure shall be set not less than 3'-0" nor more than 5'-0" from power company transformer pad. Concrete shall be class "C", 4000 PSI, 5-7% air entrained. Fill all exposed surface voids. Chamfer all edges. Slope top 1/4" to drain water. Hot or cold weather follow City of Columbus Construction and Material Specifications, Section 1000. Finish remove all form marks, provide floated and steel troweled finish.
- 5. Welded Wire Fabric: Provide 6x6-6x6. Mount on all sides and top. Maintain 3" minimum cover.
- 6. Service Enclosure: Provide a NEMA watertight stainless steel enclosure, 30"H x 18"W x 15"D. Having a single continuous hinged locking door, interior mounting panel. 6" minimum matching floor stand. Concrete and or bolt type anchor and level to pad via stainless steel machine bolt, nuts & lockwashers. Drill bottom of enclosure with 1/4" weep hole at low point.
- Service Enclosure Finish: A dark bronze approved by the City Engineer. The paint shall be a powder paint finished to a gloss of 35% (at 60 degrees).
- 8. Service Enclosure Lock:
 - A. Internal: Key all locking mechanisms alike to NEMA traffic signal number 2 key.
 - B. External: All pad locks shall be American Lock, Model No. 1207B, Key No. 43737.
- 9. Lighting Controller: A class R fusible combination lighting contactor type controller assembly rated according to the total ampacity of the lighting phase, 60HZ with solid neutral, electrically held with control fuse, 120 volt control voltage, 3 position hand off auto selector switch and photocell control. Mount all devices in a service enclosure less photo control.

Approved Manufacturer: Square "D" Night-Master SPG-60, or approved equal.

10. Photocell Controller: Provide an on-off photo-initated controller with sealed cadmium sulfide photocell to operate in -30 degrees F to +140 degrees F temperatures, thermal inertia of 15 seconds minimum, threaded pipe nipple, rated 16 Amps, 2000 Watts at 120V, and single pole single throw switch. Turn-ON shall be 1-3 footcandles and Turn-OFF to Turn-ON ratio is 5 maximum. Provide in weatherproof enclosure. Load shall remain "ON" in case of cell failure. Mount atop first pole from service enclosure.

Approved Manufacturer: Tork

- 11. Grounding: Provide 5/8" x 10'-0" copper weld one piece ground rod. Drive a minimum of 2'-0" below grade. Run #8 AWG solid copper grounding electrode conductor in 3/4" PVC conduit from rod to enclosure ground bar. "Thermo" or "Cad" weld wire connection to rod.
- Fusing: Service entrance provide dual element, time delay fuses, UL Class RK-1, 600V, rejection type.

Approved Manufacturer: Buss #LPN-RK.

 Control Circuit: Provide single element, fast acting—type fuse UL Class CC, 250V, rejector type.

Approved Manufacturer: Buss #KTK-R.

APPROVED

Olyan R Sisola 9-1-15 CITY ENGINEER DATE

SCALE: N/A

THOROUGHFARE STREET/
OLD HILLIARD
SERVICE ENCLOSURE

CITY OF HILLIARD, OHIO

STANDARD CONSTRUCTION DRAWING

1/2

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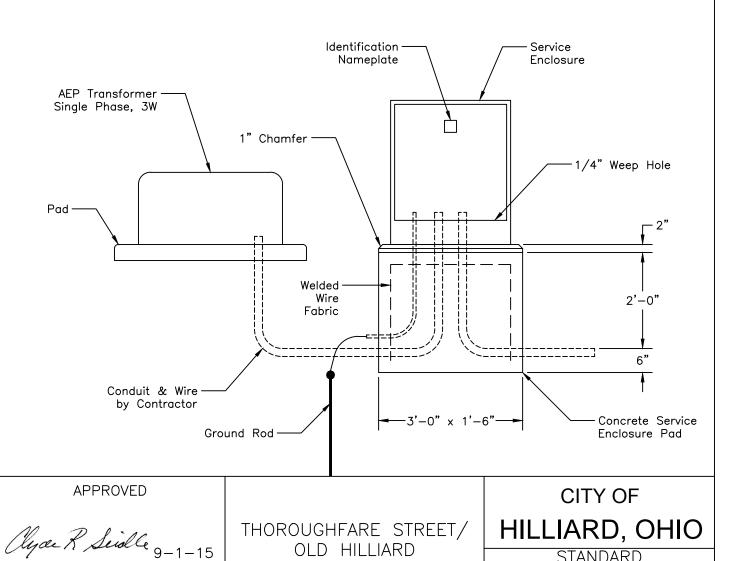
CITY ENGINEER

SCALE:

DATE

1/2" = 1'

- Nameplate: Stainless steel screw attached. Provide permanent weather resistant engraved lamincoid nameplate 3" square minimum 3/4" helvetica white letters on a dark bronze background with cabinet circuit embossed into it per plan schedule.
- Conduit: Shall be heavy wall 2". rigid nonmetallic schedule 40 PVC for use above and below ground or concrete encased. Rated for 90 degrees Celsius conductors and use in direct sunlight. Material shall be UL listed and comply with NEMA TC2-1978 and F.S. #WC-1094A. Provide in 10 foot sections. Seal all joints watertight. Glue joints with PVC cement. Bush all ends. All bends shall use long radius preformed elbows. Extend conduit to minimum 2'-0" below grade. Location to be coordinated with landscaping and utilities.
- Weatherproofing: Provide penetrating surface applied, 1 coat concrete waterproofing agent. Material shall be clear penetrating, water based, alkyalkoxysilane and contain a minimum of 40% by weight solids and be applied per manufacturer's directions. Coverage shall be 150 square feet per gallon (provide Hydrozo Enviroseal 40 or approved equal). Apply 1 coat to all concrete surfaces above grade.
- 17. Wiring: Refer to general specifications.



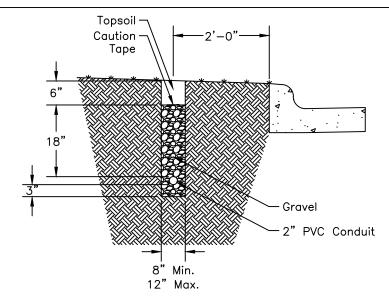
SERVICE ENCLOSURE

STANDARD

CONSTRUCTION DRAWING

SL-5

2/2



CONDUIT PARALLEL TO BACK OF CURB

Notes:

- 1. Trenching: Conduit trenches shall have vertical walls and be excavated to a depth that permits conduit to be laid at 2'-0" below finished grade with a gravel cover, above and below. Backfill gravel to topsoil limit. Trenches shall be located adjacent to and parallel with curbs or pavements and shall not deviate more than 6" from the lines designated. Trenches shall not exceed 12" in width. Remove excess soil after backfilling.
- 2. Gravel: Shall be uncrushed washed gravel and pass a 1/2" sieve. Pour in place and compact to 95% standard proctor in layers not exceeding 6" each. City to inspect during construction.
- 3. Topsoil: Shall be clean, loose friable, loamy topsoil free of subsoil or refuse. Topsoil may be from the site or imported. Topsoil shall be placed and spread over the areas designated to a depth sufficiently greater that that shown so that after natural settlement the compacted work will conform to the elevations shown.
- 4. Conduit: Shall be heavy wall rigid nonmetallic schedule 40 PVC for use above and below ground or concrete encased. Rated for 90 degrees Celsius conductors and use in direct sunlight. Material shall be UL listed and comply with NEMA TC2—1978 and F.S. #WC—1094A. Provide in 10' sections. Seal all joints watertight. Glue joints with PVC cement. Bush all ends. All bends shall use long radius preformed elbows.
- Conduit caps: Provide molded plastic or rubber capping device that only permits wire to pass through while preventing dirt, water, etc. from entering.
- 6. Pull wire: All empty conduit installed for future lighting shall contain a No. 10 AWG copper—clad pull wire.
- Caution tape: 3" wide red plastic tape with black letters reading "CAUTION BURIED LINE BELOW". Bury above conduit 6" maximum below grade. Run continuous in all trenches not covered by pavement. City to inspect prior to burying.

APPROVED

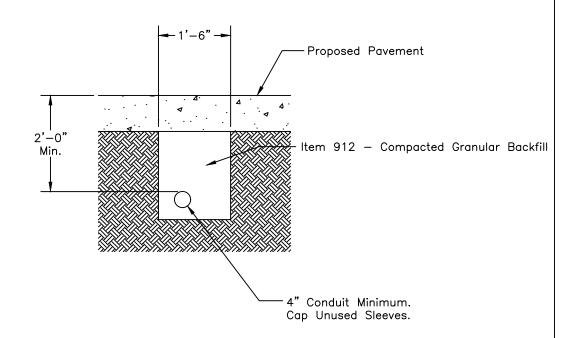
Olyan R Seislle 9-1-15 CITY ENGINEER DATE

SCALE: 1/2" = 1'

UNDERGROUND CONDUIT/TRENCH DETAILS CITY OF HILLIARD, OHIO

STANDARD CONSTRUCTION DRAWING

1/3



4" CONDUIT UNDER PROPOSED PAVEMENT & UNDER COMMERCIAL DRIVES BY OPEN TRENCH

Notes:

- 1. Trenching: Sleeve trenches shall have vertical walls and be excavated to a depth that permits sleeves to be laid at 2'-0" below finished grade with 3" concrete encasement around conduit sleeves. Sleeve trenches shall be located perpendicular to the road centerline unless otherwise specifically noted. Maintain inline with conduit setback dimensions at intersections and at curb cuts. gravel cover, above and below.
- 2. Conduit: Shall be a minimum of 4-inch Schedule 40 PVC conduits and fittings.
- Conduit caps: Provide molded plastic or rubber capping device that only permits wire to pass through while preventing dirt, water, etc. from entering.
- 4. Pull wire: All empty conduit installed for future lighting shall contain a No. 10 AWG copper—clad pull wire.

APPROVED

Olyan R Siskle 9-1-15 CITY ENGINEER DATE

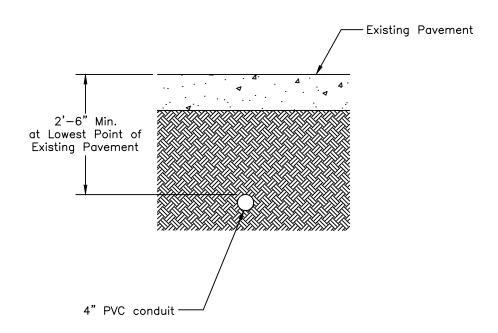
SCALE: 1/2" = 1'

UNDERGROUND CONDUIT/TRENCH DETAILS

CITY OF HILLIARD, OHIO

STANDARD CONSTRUCTION DRAWING

2/3



4" CONDUIT UNDER PROPOSED PAVEMENT & UNDER COMMERCIAL DRIVES BY HORIZONTAL DRILLING

Notes:

- Conduit sleeves placed under existing pavement or paved shoulders shall be installed by drilling, subject to approval of the City Engineer. If placed by drilling, the bore shall not exceed the conduit diameter by more than 5 percent. Conduit shall be placed with a minimum amount of disturbance to the roadway.
- Conduit: Shall be heavy wall rigid nonmetallic Schedule 40 PVC (725.05) for use above and below ground or concrete encased. Rated for 90 degrees Celsius conductors and use in direct sunlight. Material shall be UL listed and comply with NEMA TC2—1978 and F.S. #WC—1094A. Provide in 10' sections. Seal all joints watertight. Glue joints with PVC cement. Bush all ends. All bends shall use long radius preformed elbows.
- Conduit caps: Provide molded plastic or rubber capping device that only permits wire to pass through while preventing dirt, water, etc. from entering.
- 4. Pull wire: All empty conduit installed for future lighting shall contain a No. 10 AWG copper—clad pull wire.

Olyan R Siisle 9-1-15 CITY ENGINEER DATE

SCALE:

1/2" = 1'

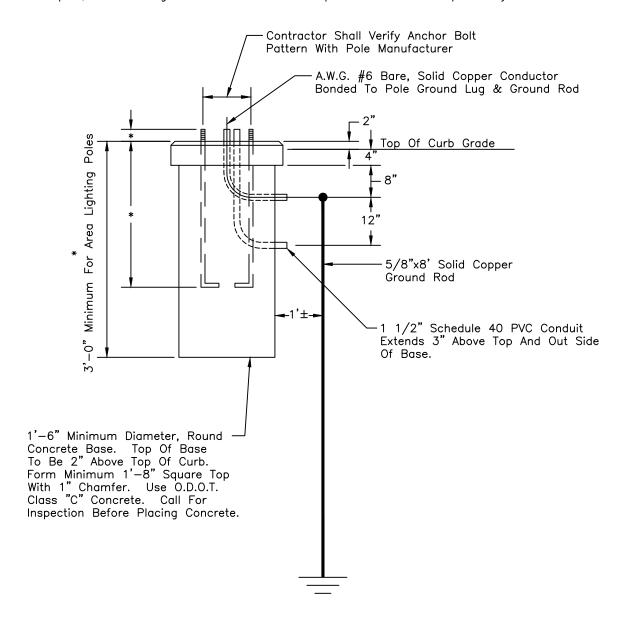
APPROVED

UNDERGROUND CONDUIT/TRENCH DETAILS CITY OF
HILLIARD, OHIO
STANDARD
CONSTRUCTION DRAWING

′3 |

3/3

1.* Design of anchor bolts, concrete base dimensions, soils engineering analysis for wind load on the pole, and meeting other code structural requirements is the responsibility of the contractor.



APPROVED

Olyan R Sissle 9-1-15 CITY ENGINEER DATE

SCALE: 1/2" = 1'

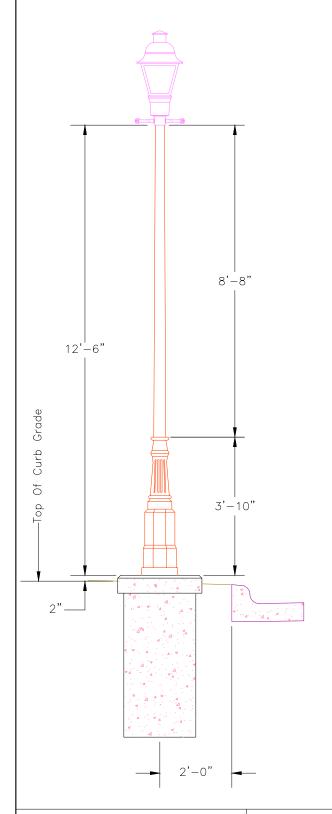
LOCAL STREET
-RESIDENTIAL
-COMMERCIAL/MIXED

POLE BASE

CITY OF HILLIARD, OHIO

STANDARD CONSTRUCTION DRAWING

1/1



- Luminaire assembly: cast aluminum with stainless steel fasteners. Hinged roof. Slipfitter for 3" O.D. Post. Photoelectric control receptacle. Hadco Independence LED Model VX15148G3AC3WRN740A5NSP1L w/ twist lock receptacle for photocell, 4000K, 120v.
- 2. Photocell: Tork model number 5021S or approved interchangeable equal.
- 3. Pole: cast aluminum octagonal base with an 8" x 9 1/2" access door, a tapered, fluted upper casting, and a tapered, non-fluted shaft with a 4" base and 3" top, and a wall thickness of 0.125", aluminum alloy 6063—T6 with satin ground finish, black. Hapco, Abbington Post, catalog number ABJ12T3P1, or approved interchangeable equal.
- 4. Pole base cable connections: install weatherproof in—line fuseholders with 10 amp fuse, Buss KTK—10 fuse or approved interchangeable equal. Buss HEB—AA on the phase conductor and neutral, or approved interchangebale equal. Provide enough slack cable to allow fuseholders to be pulled out of access hole 12".

APPROVED

Clah a, Rausch
2-9-22
CITY ENGINEER DATE

SCALE: 3/8" = 1'

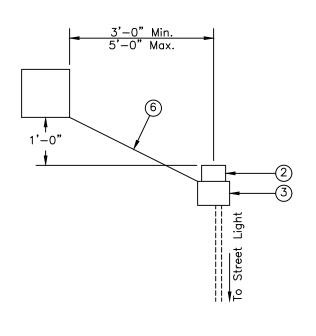
LOCAL STREET
-RESIDENTIAL
-COMMERCIAL/MIXED

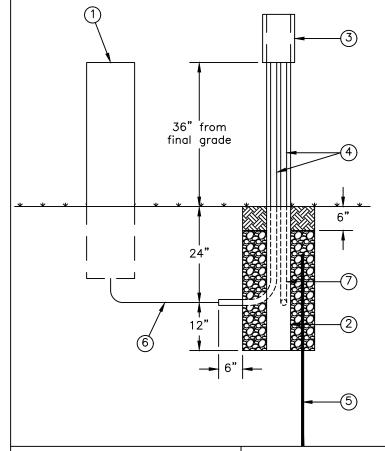
POLE & LUMINAIRE

CITY OF HILLIARD, OHIO

STANDARD CONSTRUCTION DRAWING

1/1





- Existing or proposed A.E.P. Transformer or pedestal. Location of service enclosure and service shall be coordinated with A.E.P. In cases of obstructions or doubt about clearance, location shall be by A.E.P. Engineers.
- 2. Post shall be pressure treated 4"x6" wood, buried a minimum of 3'-0". It shall be set plumb and the bottom 2'-6" of the hole backfilled against undisturbed or compacted earth, with Item 304 compacted in 6" layers. The top 6" of the hole shall be backfilled with compacted earth. City to inspect upon backfill.
- 3. Service enclosure, rainproof, nema 3r, 120/240 volt, 60 amp, 1 phase, 3 wire, 2 breaker with 1-1/2" removable hubs, I-T-E, catalog number W0204 ML 1060-2, or an approved interchangeable equal. Install 20 amp circuit breakers. Furnish 2 pedestal locks, Utilco type PEL 2, or Fargo GM-305, or an approved equal. Face enclosure in direction of street.
- 4. 1-1/2" schedule 40 pvc conduit shall extend 2'-0" minimum below grade and 6" outside of Item 304.
- 5/8"x8' solid copper ground rod, bond to service enclosure with awg #4 bare solid copper conductor.
- Lighting circuit, cu, type use, 600 volt, awg #6 phase, awg #8 neutral.
 Contractor shall bury cable from the service enclosure to A.SEP. Transformer or pedestal and leave 5' minimum leads for connection by A.E.P.
- Buried cable, cu, type THHN, 600 volt, AWG #10 (black, white, green)with ground, encased in 1-1/2" schedule 40 pvc conduit.
- Service enclosure shall be staked for location & grade prior to installation.

APPROVED

Olyae R Seidle 9-1-15 CITY ENGINEER DATE

SCALE: 1/2" = 1'

LOCAL STREET
-RESIDENTIAL

SERVICE ENCLOSURE

CITY OF HILLIARD, OHIO

STANDARD CONSTRUCTION DRAWING

1/1

Notes.

- 1. Coordination: Coordinate location of transformer and pad with power company.
- 2. Transformer: Provided, installed and wired by power company.
- Transformer Pad: Install per power company requirements for size and location. Refer to service enclosure pad for material specifications.
- 4. Service Enclosure Pad: Structure shall be set not less than 3'-0" nor more than 5'-0" from power company transformer pad. Concrete shall be class "C", 4000 PSI, 5-7% air entrained. Fill all exposed surface voids. Chamfer all edges. Slope top 1/4" to drain water. Hot or cold weather follow City of Columbus Construction and Material Specifications, Section 1000. Finish remove all form marks, provide floated and steel troweled finish.
- 5. Welded Wire Fabric: Provide 6x6-6x6. Mount on all sides and top. Maintain 3" minimum cover.
- 6. Service Enclosure: Provide a NEMA watertight stainless steel enclosure, 30"H x 18"W x 15"D. Having a single continuous hinged locking door, interior mounting panel. 6" minimum matching floor stand. Concrete and or bolt type anchor and level to pad via stainless steel machine bolt, nuts & lockwashers. Drill bottom of enclosure with 1/4" weep hole at low point.
- Service Enclosure Finish: A dark bronze approved by the City Engineer. The paint shall be a powder paint finished to a gloss of 35% (at 60 degrees).
- 8. Service Enclosure Lock:
 - A. Internal: Key all locking mechanisms alike to NEMA traffic signal number 2 key.
 - B. External: All pad locks shall be American Lock, Model No. 1207B, Key No. 43737.
- 9. Lighting Controller: A class R fusible combination lighting contactor type controller assembly rated according to the total ampacity of the lighting phase, 60HZ with solid neutral, electrically held with control fuse, 120 volt control voltage, 3 position hand off auto selector switch and photocell control. Mount all devices in a service enclosure less photo control.

Approved Manufacturer: Square "D" Night-Master SPG-60, or approved equal.

10. Photocell Controller: Provide an on-off photo-initated controller with sealed cadmium sulfide photocell to operate in -30 degrees F to +140 degrees F temperatures, thermal inertia of 15 seconds minimum, threaded pipe nipple, rated 16 Amps, 2000 Watts at 120V, and single pole single throw switch. Turn-ON shall be 1-3 footcandles and Turn-OFF to Turn-ON ratio is 5 maximum. Provide in weatherproof enclosure. Load shall remain "ON" in case of cell failure. Mount atop first pole from service enclosure.

Approved Manufacturer: Tork

- 11. Grounding: Provide 5/8" x 10'-0" copper weld one piece ground rod. Drive a minimum of 2'-0" below grade. Run #8 AWG solid copper grounding electrode conductor in 3/4" PVC conduit from rod to enclosure ground bar. "Thermo" or "Cad" weld wire connection to rod.
- Fusing: Service entrance provide dual element, time delay fuses, UL Class RK-1, 600V, rejection type.

Approved Manufacturer: Buss #LPN-RK.

 Control Circuit: Provide single element, fast acting—type fuse UL Class CC, 250V, rejector type.

Approved Manufacturer: Buss #KTK-R.

APPROVED

Olyan R Seidle 9-1-15 CITY ENGINEER DATE

N/A

SCALE:

SERVICE ENCLOSURE

LOCAL STREET -

COMMERCIAL/MIXED USE

HILLIARD, OHIO

STANDARD

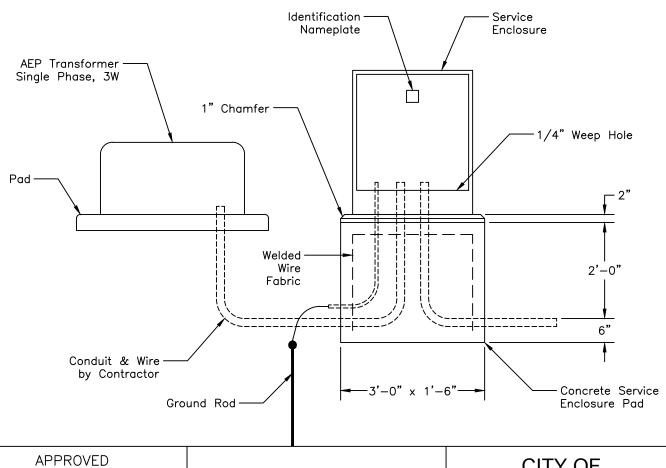
CITY OF

CONSTRUCTION DRAWING

1/2

5./Public Service - Engineering/Hilliard Standards/Drawings/ACAD/Street Lighting 9-1-15.dwg, 9/18/2015 7:43:57 AM

- 14. Nameplate: Stainless steel screw attached. Provide permanent weather resistant engraved lamincoid nameplate 3" square minimum 3/4" helvetica white letters on a dark bronze background with cabinet circuit embossed into it per plan schedule.
- 15. Conduit: Shall be heavy wall 2". rigid nonmetallic schedule 40 PVC for use above and below ground or concrete encased. Rated for 90 degrees Celsius conductors and use in direct sunlight. Material shall be UL listed and comply with NEMA TC2—1978 and F.S. #WC—1094A. Provide in 10 foot sections. Seal all joints watertight. Glue joints with PVC cement. Bush all ends. All bends shall use long radius preformed elbows. Extend conduit to minimum 2'—0" below grade. Location to be coordinated with landscaping and utilities.
- 16. Weatherproofing: Provide penetrating surface applied, 1 coat concrete waterproofing agent. Material shall be clear penetrating, water based, alkyalkoxysilane and contain a minimum of 40% by weight solids and be applied per manufacturer's directions. Coverage shall be 150 square feet per gallon (provide Hydrozo Enviroseal 40 or approved equal). Apply 1 coat to all concrete surfaces above grade.
- 17. Wiring: Refer to general specifications.



Olyan R Seidle 9-1-15 CITY ENGINEER DATE

SCALE: 1/2" = 1'

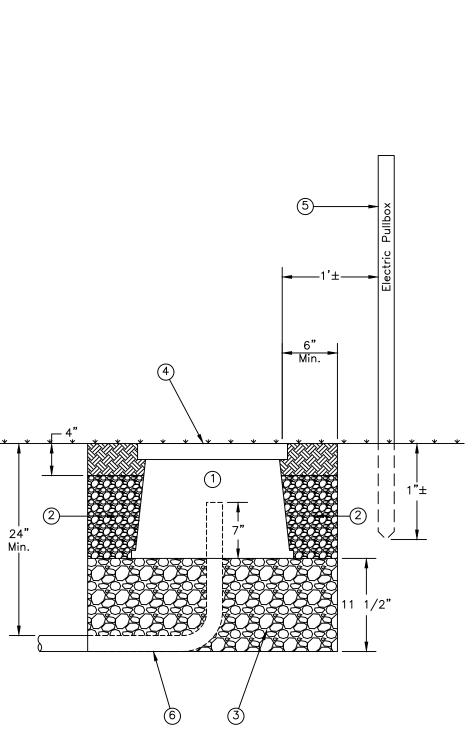
LOCAL STREET —
COMMERCIAL/MIXED USE

SERVICE ENCLOSURE

CITY OF HILLIARD, OHIO

STANDARD
CONSTRUCTION DRAWING

2/2 SL-10



Notes:

- 1. Pull box, green, high density polyethylene, rectangular, minimum dimensions 14" wide, 19" long, 15" deep with polymer concrete top ring and lid. Lid shall be bolt down with stainless steel fittings and embossed with "ELECTRIC" or "E". Carson Industries LLC, Model 1419—12, or an approved interchangeable equal.
- COLS Item 304 —
 Aggregate Base on all sides of pull box, compacted in 6" layers, against undisturbed earth, to within 4" of finished grade. Top 4" compacted earth per COLS Item 203.
- 3. Minimum 11.5" #57 stone under pull box.
- 4. Top of pull box to be set at finished grade (1/2" above top of curb along street).
- 2"x2"x4' wooden stake, labeled electric pullbox, driven 1'± away from pull box. Exposed part of stake to be painted red.
- 6. 1 1/2" schedule 40 PVC conduit.
- A 4' minimum service loop shall be provided in all pull boxes.
- 8. Only waterproof connections shall be allowed in pull boxes. No wire nuts or electric tape allowed.
- 9. Conduit elbow shall extend 7" up into pullbox.

APPROVED

CITY ENGINEER DATE

SCALE: 1" = 1'

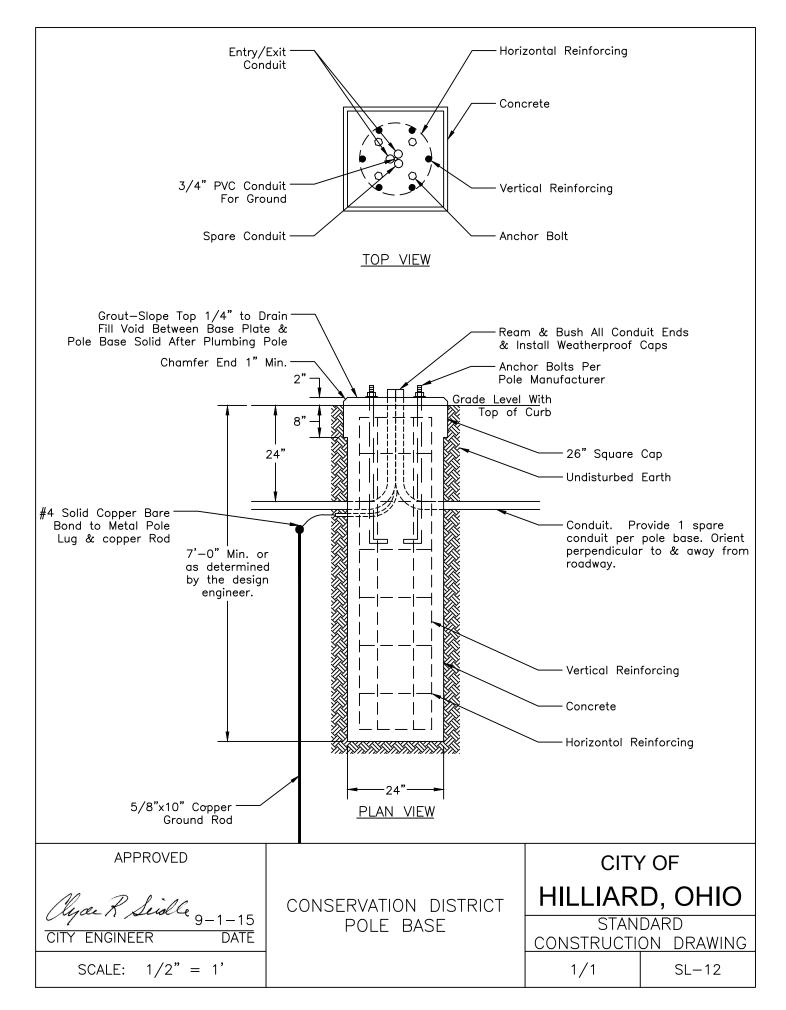
LOCAL STREET
-RESIDENTIAL

PULL BOX

CITY OF HILLIARD, OHIO

STANDARD CONSTRUCTION DRAWING

1/1



5.Public Service - Engineering/Hilliard Standards/Drawings\ACAD\Street Lighting 9-1-15.dwg, 9/18/2015 7:44:38 AM

Notes:

- General Description: Aluminum square tapered anchor base with finish: A black approved by the City Engineer. The paint shall be a powder paint finished to a gloss of 35% (at 60 degrees) spun aluminum finish with pole cap, base cover and bolt covers.
- 2. Pole Cap: Provide an ornamental aluminum alloy cap approved by the city engineer fastened via stainless steel screws.
- Pole Damper: Provide a second mode vibration damper attached to midpoint via welding. Locate inside pole. Factory installed.
- 4. Base Flange: Provide a one piece cast socket of aluminum alloy 356—T6. The flange shall be joined to the shaft by means of continuous weld externally and internally.
- Base Cover: Provide bolt covers of aluminum alloy 43 and stainless steel screws for attachment.
- 6. Miscellaneous Hardware: All nuts, bolts, and washers used in the fabrication of the pole shall be grade 18—8 stainless steel except for anchorage hardware.
- Wrapping: Each pole shaft shall be wrapped with protective material during shipping & remain wrapped until pole is to be erected. All parts shall be boxed and/or banded.
- 8. Pole Shaft: The shaft shall be one piece seamless with a minimum wall thickness of 0.156 inches, 5 inch square tapered tube of alloy 6063—T6 and shall be full—length tempered after welding on top base flange to produce the T6 temper. The entire pole assembly shall be rated @ 90 mph with a 30% gust factor for on EPA minimum of 8.1.
- 9. Hand Hole Placement: The pole shall be orientated so that the hand hole is located on the sidewalk side of the pole away from traffic.

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Olyan R Sisola 9-1-15 CITY ENGINEER DATE

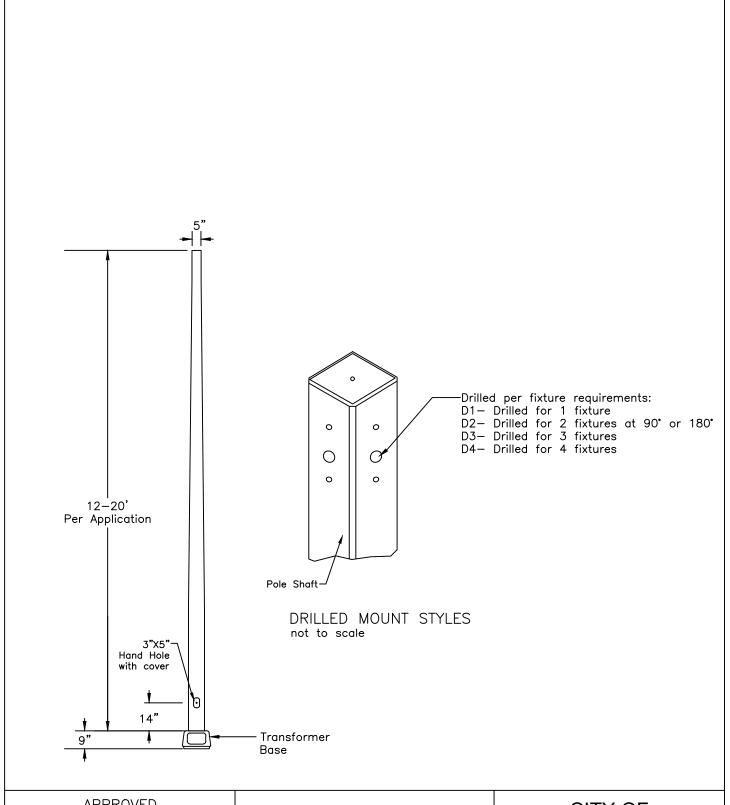
SCALE: N/A

CONSERVATION DISTRICT POLE

CITY OF HILLIARD, OHIO

STANDARD CONSTRUCTION DRAWING

1/2



APPROVED

Nyce R Sidle 9-1-15 CITY ENGINEER DATE

> 1/4" = 1'SCALE:

CONSERVATION DISTRICT POLE

CITY OF HILLIARD, OHIO

STANDARD CONSTRUCTION DRAWING

2/2

5:Public Service - Engineering/Hilliard Standards/Drawings/ACAD/Street Lighting 9-1-15.dwg, 9/18/2015 7:45:02 AM

Notes:

- 1. General Description: LED Roadway Fixture, 4000K color temperature.
- 2. Housing: One piece cast aluminum.
- 3. Finish: Corrosion resistant polyester powder paint, black.
- 4. Mounting: Mounted on a single decorative cross arm, ANP model PA311-1
- 5. Labeling: IP65 rated.
- 6. Distribution: Structured LED array optimized for roadway photometric distribution.
- 7. Approved Manufacturer: ANP Bella Vista Series BVA01, or approved equal.

*Voltage: 120v-277v auto sensing

8. LED: Rated L70 at 50,000 hours. 46W for intersections, 117W for arterials/roundabouts

APPROVED

Olyan R Sisolle 9-1-15 CITY ENGINEER DATE

SCALE: N/A

CONSERVATION DISTRICT LUMINAIRE

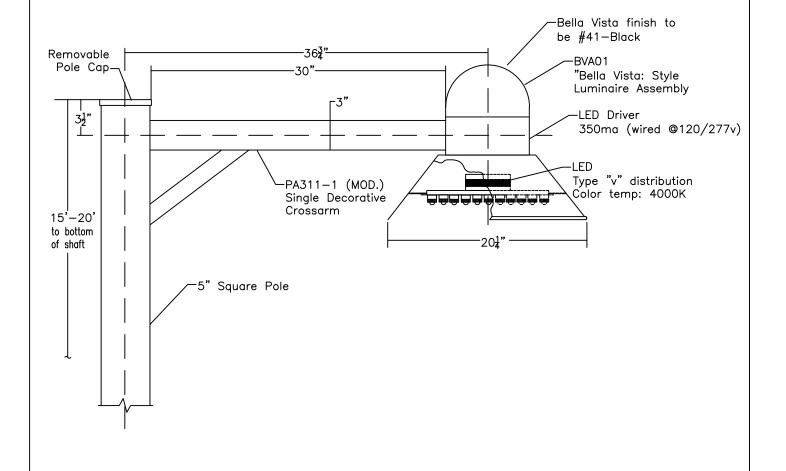
CITY OF HILLIARD, OHIO

STANDARD CONSTRUCTION DRAWING

1/2

5./Public Service - Engineering/Hilliard Standards/Drawings/ACAD/Street Lighting 9-1-15.dwg, 9/18/2015 7:45:14 AM

- 9. Cable: Provide #12 THWN, stranded copper 600V, 90 degrees Celsius conductors. Wire to luminaire. Secure pole wiring with cable grip provided with luminaire. Provide adequate length to extend minimum 2 feet out of hand hole.
- Execution: All luminaires shall be plumb and level. Adjust lamp socket assembly to Type II or Type III cutoff. All luminaires shall be operational prior to inspection. All surfaces shall be cleaned of dirt, debris, etc. free of scratches, dents, etc.



APPROVED

CITY ENGINEER DATE

SCALE: 1/2" = 1'

CONSERVATION DISTRICT LUMINAIRE

CITY OF
HILLIARD, OHIO
STANDARD

STANDARD CONSTRUCTION DRAWING

2/2

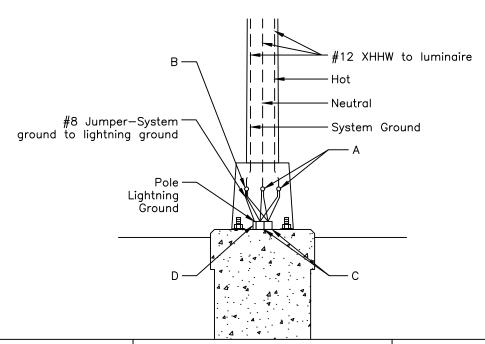
5.1Public Service - Engineering/Hilliard Standards/Drawings/ACAD/Street Lighting 9-1-15.dwg, 9/18/2015 7:45:26 AM

Notes:

- 1. Transformer Base: Provide a one-piece cast aluminum alloy
- 2. Grounding: Each transformer base shall contain an internal lug with drilled hole for attaching a ground conductor.
- 3. Nameplate: Stainless steel, screw attached, provide permanent weather resistant engraved Lamicoid nameplate 3" square minimum 3/4" helvetica white letters on a dark bronz background with pole number, circuit and station embossed into it per plan schedule. To be installed on the base door.

4. Connections:

- A. Fused Inline Y connector kit type II with waterproof boots and breakaway receptable. Fuse at 10 Amps, Homac FYU—M and DYU—M, Buss KTK—10 fuse or approved interchangeable equal.
- B. Unfused Inline Y connector kit type III flood seals with waterproof boots and breakaway receptacle, Homac DY series.
- C. Provide molded plastic or rubber capping device that only permits wire pass through while preventing dirt, water, etc. entry.
- D. Pole lighting ground lug uninsulated copper compression terminal UL listed for 600V. Size for wire specified. Drill, tap, and bolt to transformer base Burndy YA series. Bond system ground to lightning rod ground.
- E. Deliver transformer to city.
- 5. Provide 2' service loop in all wiring to bring connectors and fuse holders out thru handhole.



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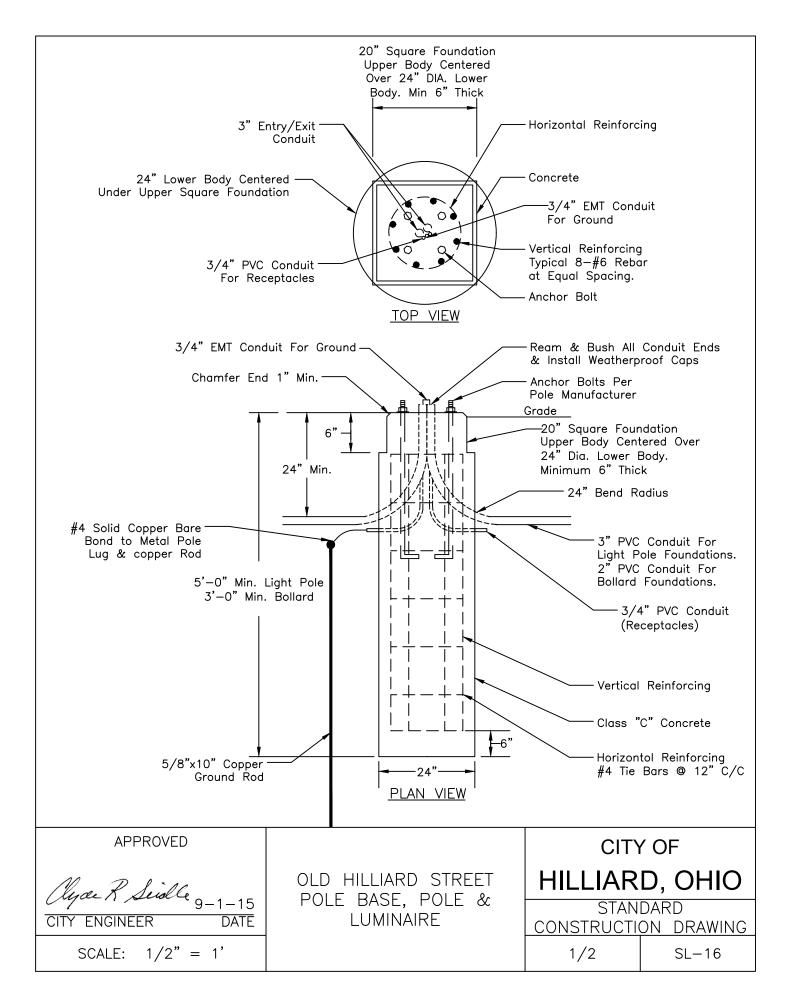
Olyan R Seislle 9-1-15 CITY ENGINEER DATE

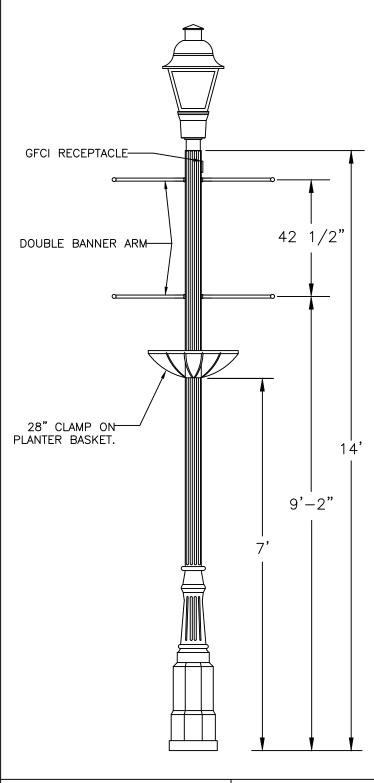
SCALE: 1/2" = 1'

CONSERVATION DISTRICT TRANSFORMER BASE WIRING DETAIL CITY OF HILLIARD, OHIO

STANDARD CONSTRUCTION DRAWING

1/1





Notes:

- Luminaire assembly: cast aluminum with stainless steel fasteners. Hinged roof. Slipfitter for 4" O.D. Tenon. Architectural Area Lighting Providence LED Model # PROV T2-32LED 4K 700 BLK HSS.
- Pole: cast aluminum octagonal base with an 8" x 9 1/2" access door, a tapered, fluted upper casting, and a straight, 5" fluted shaft and a wall thickness of 0.188", aluminum alloy 6063—T6 with satin ground finish, black. Provide Double Banner Arms and Ground Fault Interrupter Receptacle with Pole. Sternberg Lighting, Virginia Series, catalog number 3714FP5/GFCI DBA/BK, or approved interchangeable equal.
- 3. Pole base cable connections: install weatherproof in—line fuseholders with 1 amp fuse, Buss KTK—1 fuse or approved interchangeable equal. Buss HEB—AA on the phase conductor and neutral, or approved interchangebale equal. Provide enough slack cable to allow fuseholders to be pulled out of access hole 12".
- 4. Clamp on basket: 28" dia. clamp on planter basket with powder coat paint to match pole. Baskets shall be mounted for easy removal from pole. Basket shall be constructed of 6061 or 6063—T6 aluminum.

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Olyce R Seidle 9-1-15 CITY ENGINEER DATE

SCALE: 3/8" = 1'

OLD HILLIARD STREET POLE BASE, POLE & LUMINAIRE CITY OF HILLIARD, OHIO

STANDARD CONSTRUCTION DRAWING

2/2

1. Wiring to be 600V type THWN Cu per the table below.

	THOROUGHFARE											
			Typical									
Cond.	Cond.	No. of	Fixt		Watt /	Voltage						
Size	Material	Fixture	Spacing	Voltage	Fixt	Drop	% Drop					
#4	Cu	10	90	480	89	1.3	0.3%					
		15	90	480	89	2.9	0.6%					
		20	90	480	89	5.2	1.1%					
#6	Cu	10	90	480	89	2.0	0.4%					
		15	90	480	89	4.4	0.9%					
		20	90	480	89	7.8	1.6%					
#8	Cu	10	90	480	89	3.1	0.6%					
		15	90	480	89	6.9	1.4%					

	OLD HILLIARD											
			Typical									
Cond.	Cond.	No. of	Fixt		Watt /	Voltage						
Size	Material	Fixture	Spacing	Voltage	Fixt	Drop	% Drop					
#4	Cu	10	90	240	75	2.5	1.0%					
		15	90	240	75	5.6	2.3%					
#6	Cu	10	90	240	75	2.5	1.0%					
		15	90	240	75	5.6	2.3%					
#8	Cu	10	90	240	75	2.5	1.0%					
		15	90	240	75	5.6	2.3%					

RESIDENTIAL										
			Typical							
Cond.	Cond.	No. of	Fixt		Watt /	Voltage				
Size	Material	Fixture	Spacing	Voltage	Fixt	Drop	% Drop			
#8	Cu	3	150	120	80	0.5	0.4%			

APPROVED

Olyan R Seidle 9-1-15 CITY ENGINEER DATE

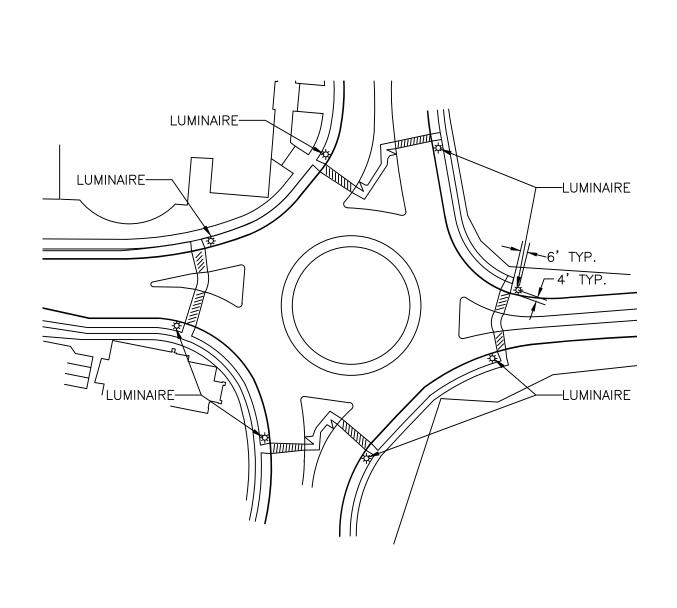
SCALE: N/A

CONDUCTOR DETAILS

CITY OF HILLIARD, OHIO

STANDARD CONSTRUCTION DRAWING

1/1



APPROVED

Olyce R Seidle 9-1-15 CITY ENGINEER DATE

SCALE: 1" = 80'

ROUNDABOUT LIGHTING TYPICAL LAYOUT CITY OF
HILLIARD, OHIO

STANDARD CONSTRUCTION DRAWING

1/1

			HILL	JARD CODE F	-IXTURE F	REPLACEMENT SCH	EDULE			
EXISTING FIXTURE							NEW FIXTURE			
MANUFACTURER MODEL DIST LAMP WATTS HEIGHT					MANUFACTURER	MODEL	DIST	LAMP	WATTS	
KIM	SHOEBOX	3	HPS	250	30'	GENERAL	EANA5F45401BCDKBZ	4	LED	148
GENERAL ELECTRIC	GE M-400R2	3	HPS	200 OR 250	30'	ELECTRIC	EANASP4S4UIBCDNBZ			140
ARCHITECTURAL										
AREA LIGHTING	PROV-V3	3	HPS	150	14"	ARCHITECTURAL	PROV-T3-32LED-4K-700	3	LED	76
ARCHITECTURAL						AREA LIGHTING	PROV-13-32LED-4N-700		LED	76
AREA LIGHTING	PROV-H3	3	HPS	150	12.5'					
HADCO	VS15AB3YUE	3	HPS	150	12.5'	HADCO	VX15148AC3RNA3NSL	3	LED	70

APPROVED

Olyae R Seidle 9-1-15 CITY ENGINEER DATE

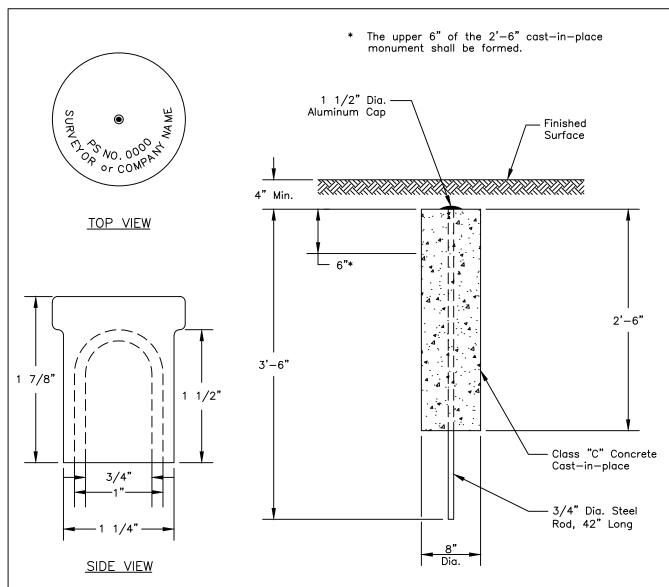
SCALE: NONE

RETROFIT OF EXISTING LIGHTING

CITY OF HILLIARD, OHIO

STANDARD CONSTRUCTION DRAWING

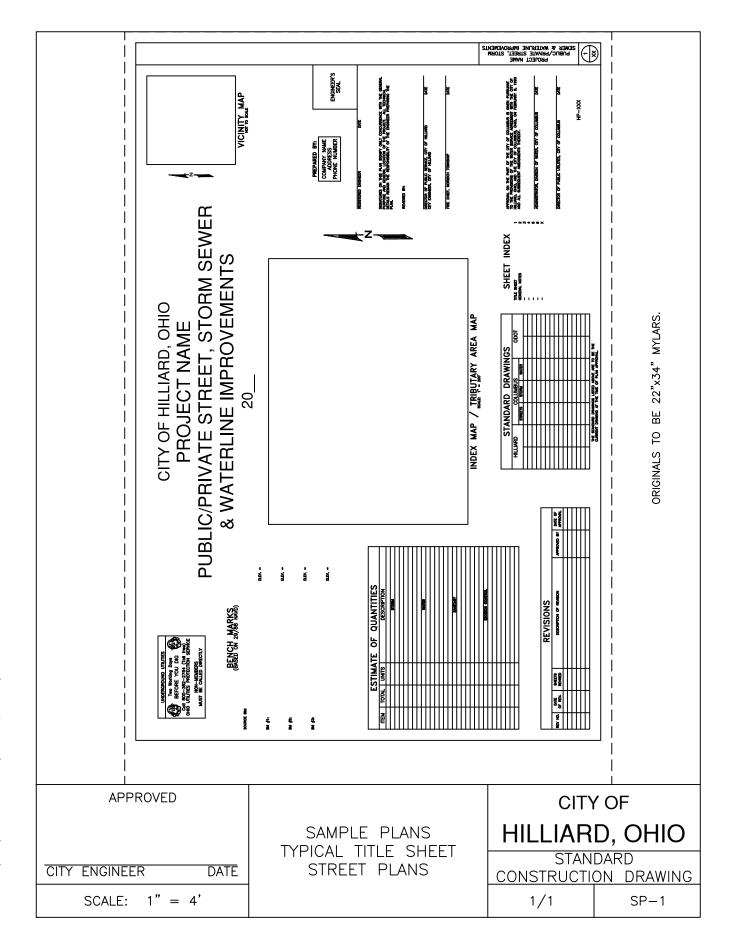
1/1 SL-19

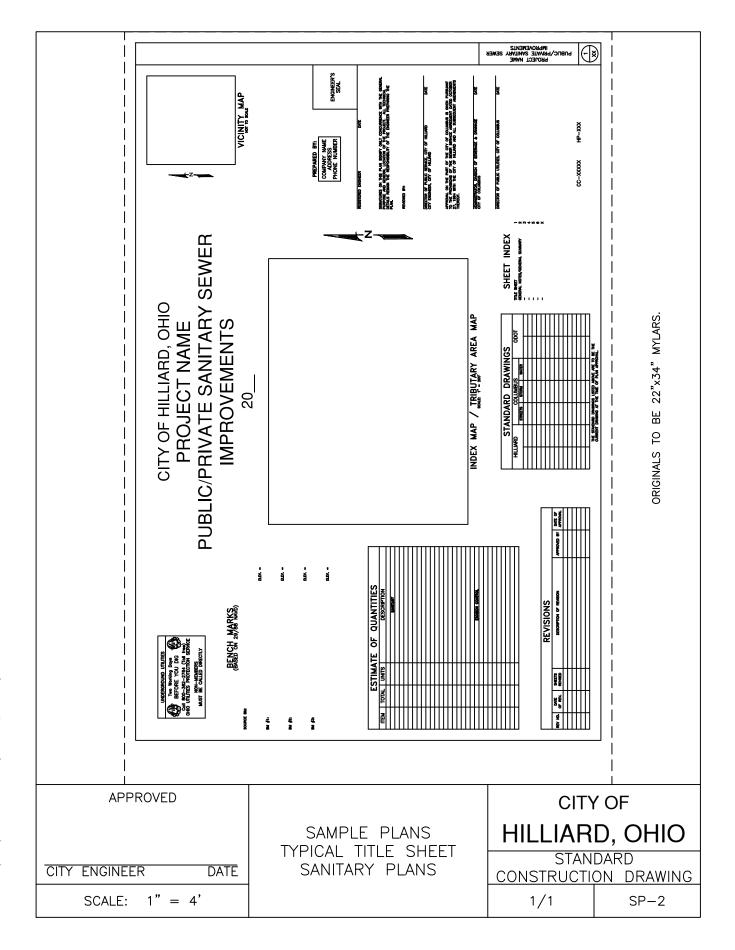


Notes:

- Monuments shall be placed under the direction of a Surveyor, registered in the State of Ohio, in accordance with Chapter 4733-37 of the Ohio Administrative Code. Markers are to be set, as shown, by the subdivider at the time of construction, at the locations indicated on the Record Plat.
- 2. All aluminum caps used shall have an insulator to eliminate dissimilar metal corrosion.
- 3. All aluminum caps shall have the company name or the name and number of the surveyor responsible for setting the marker, stamped in the top.

APPROVED		CITY	/ OF
	SURVEY MARKER —	HILLIAR	D, OHIO
CITY ENGINEER DATE	PERMANENT		DARD ON DRAWING
SCALE: 1" = 1'		1/1	SM-1





ENGINEER

SCALE:

DATE

1" = 4'

PROJECT NAME PUBLIC/PRINATE STREET, STORM SEWER & WATERLINE IMPROVEMENTS CENERIA NOTES Approal of these pipes is configured upon the CDV of Hillard security on secentarial book all hold the CDV (Approal property or security from the CDV of Hillard security of the configuration of the CDV of the security from the CDV of the CDV 2, by notification of the vert on steem on these destrips must have prior written express by the Hills On Department of the Administrator, Defan of Water, City of Common.

The ware the mediate and bestdelines shall be in conceisons with the current rate and reportations of On 40 Chairman, Shallon of Water. bends, johs deflactions and filtings shot be backed with concrete per City of Charmieus standers. In the second he because of these than (10) feet harbonistity and one (1) feet verbodily from senior lines shall be backed of heart har (10) feet harbonistity and one (1) feet verbodily from senior. 12. Where service beam shall be bound it have back the right-dr-wy.

22. The bytespin and the backed to COLI Shan Give a beat made (by of Alline) and the byte of the bound bytespin and the beat by Downbard Shankston. Applications was not wishen or marked at the COLI of Higher Alline and the channel and familiar in conscious with COLI last \$01.11 plus to bepared the Alline when the beat the channel and familiar in conscious with COLI last \$01.11 plus to be between the collection of the channel and familiar in conscious with COLI last \$01.11 plus to be between the collection of the channel and familiar in conscious with COLI last \$01.11 plus to be between the collection of the channel and the ch The Centroctor shall test all water lines in escendance with COLS from 801.12. Teating shall be den nder the aspendaton of the City Engineer or his authorized representative at the Contractor's expense. 18. No service connection parells shall be leaved or connections made to any service. Neps until water to be defended by the CDy of Construct, Debase of Water.
19. A top great for each varies are the manual and to defined from the CDy of Hilland and the CDy of CDA Debase of News price are madely any top that the the defined from the CDy of Hilland and the CDy of CDA Debase of News price as madely any top that the news from. On etod end lines in oul-de-secu, two 3/4 linch tape shall be installed within twe (2) feet of the math. to the stop and the proclament between broad presents for the stop and were for undergrand deaths on enterly debty administration, and eath to Mutadement and the posterior is exceeding early, as shown on the special place, picts to take being healest. All fill required and special is exceeded with COSS in T. Confident 1. This work shall be parformed as part of in ord the local shall be included under them 20%. alons, landeroping, estructures or other oppurturences deturbed or demaged during constitution shall be of repoint to the estatication of the City Engineer. The Contractor shall pay for the cost of this ware to discontinuo grappia and the medical of all the Areas with region dependent of the force of a fine and the medical and a discontinuo del the fine of a discontinuo fine and a discontinuo del the fine of the discontinuo del termino d ORIGINALS TO BE 22"x34" MYLARS. defined season imposing hilling by the above mentioned portion shall be medicated and left in a in measurably emperate to the desermined by the original imposition. The Controlatio, but often of the Uniforms, and convent my change in the confident resulting from the Controlation. The Controdor shall hetail street lights at the locations shown on the plane, beluifies all whing and sensets and provide a complete operating lighting system that complete with the City of Hilland elern server constructed under this pion shall most the requirements of COLS flam DO1, with a rm builds dismoter of 12 horizon. (\$16) The bank has a fact that the parties of course of course of the parties of the pa Al sel subgrate shall be prepared and comparted in occordance with item 204 to a dayth of 12 inches y the subgrate surface. Embyrate shall be scorlind and contain sufficient mateliars to meet item 204 seather replacements. Processes shall be out in mot, straight lines the hall depth of the existing povement, or as required by Cly Engineer. powed of these plans is configure, spen of construction of the contraction of the unit, taking of or of selficed for recording plan's to commencement of wart. He wart, which we an eccenturity, all be obtened to preceed un The Controller shall controll presence borois marks, property corrent, reference paths, dates and the controller shall be controller and the controller shall be controller to the controller to CDV Defines all not be responsible for means, maltocks, procederss, techniques, or expenses of substitution that are not specified levels. The CDV Definition well not be responsible for softey on the work or the follow by the controller to perform work according to plans. . Preparty boundarine, including property lines and road right-of-way, are aboun from the best information and are not necessarily complete or convest. In Costocider shall be responsible for hading the Bristand work confirm to the Brea, grades, elevation demonsters cated for on the desartings and Spakes southers device shall not be operated at any time in each a manner that the noise areated substantially the noise customantly and necessarily attendant to the resonable and efficient performance of suc Controday/Developer shall be responsible to obtain all recessory permits.
Controdar and confine the ochifies to the project sha, eateling right-of-sign, temporary and est essensith, and shall not enter upon other properties without unifus permission of the senses. The CM Engineer or the authorized representation will make impaction of the work. The CM England of American Property and a few of the control of the request the increasery passion many read to the register of this work and the polybel. 1 The Controders shall restruct all detected once to equal or better then estable before constitution, and explained the constitution. The constitution is all to restruct the best pushes and accordant better constitution. Juring construction the Contractor shall provide edequate declarage and proper sell areafon control returbles of all editions reads and lends, per COLS lies 207. **APPROVED** CITY OF

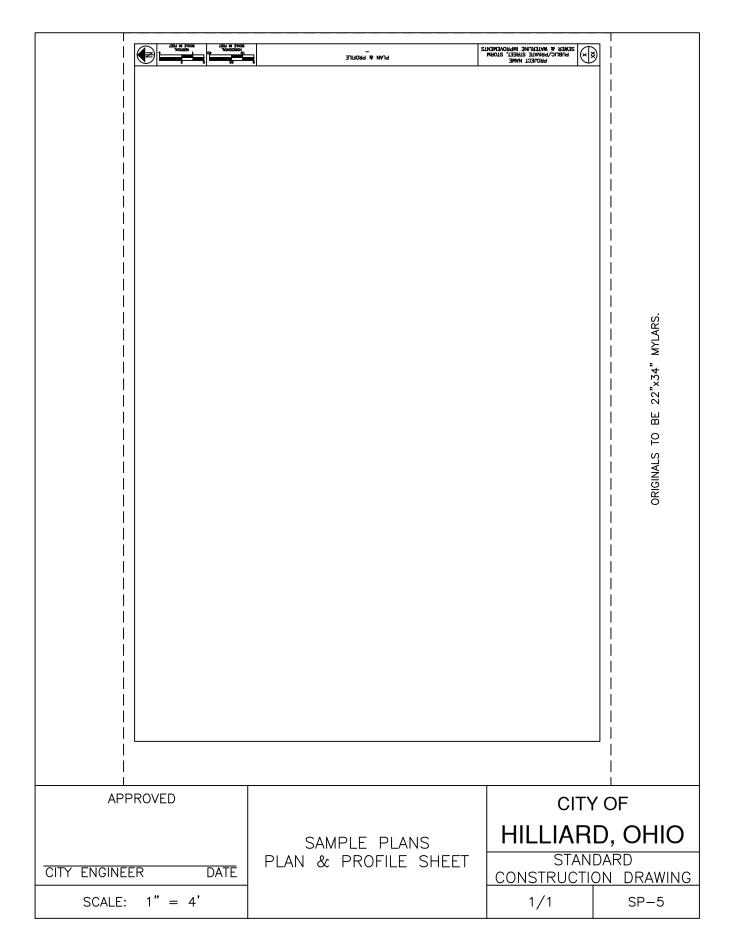
SAMPLE PLANS
GENERAL NOTES

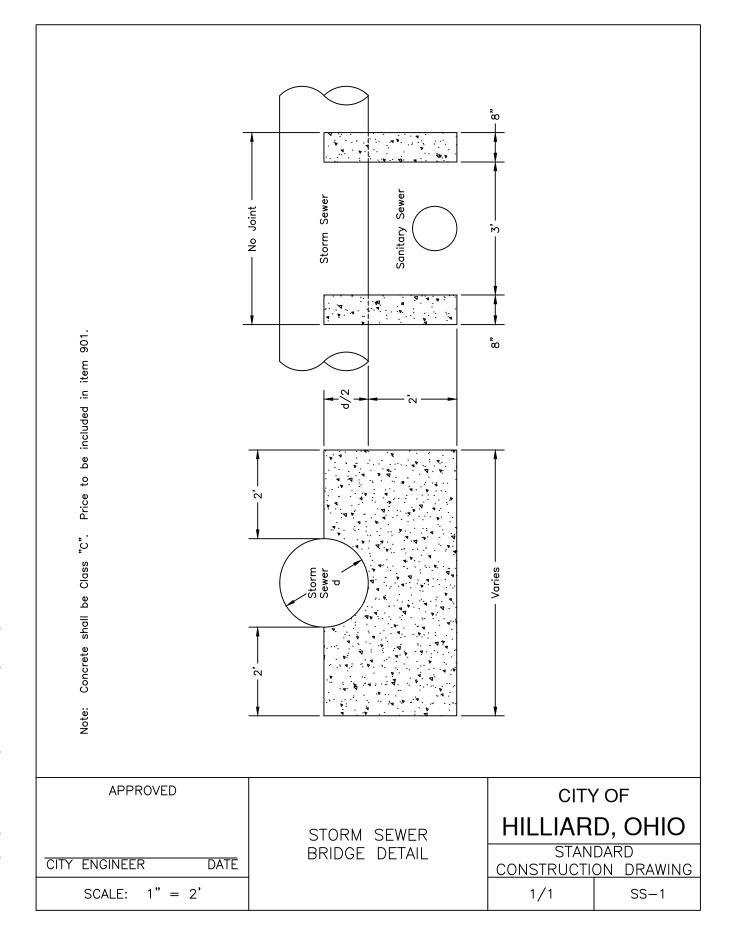
HILLIARD, OHIO

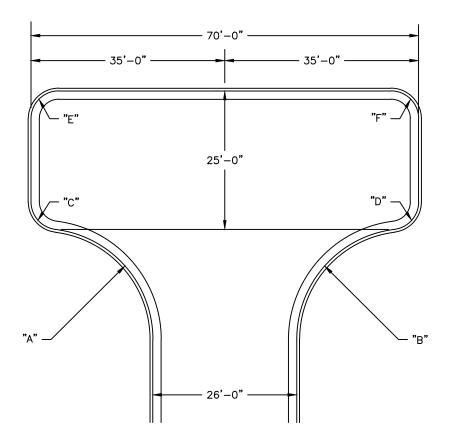
STANDARD

CONSTRUCTION DRAWING

1/1 SP-3



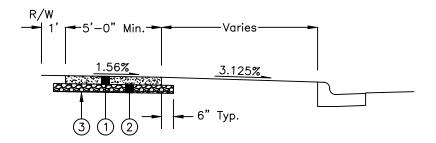


 $^{"A"}$ & "B" CURVE DATA $\Delta = 83^{\circ}06^{\circ}28^{"}$ $R = 20.00^{\circ}$ $T = 17.73^{\circ}$ $L = 29.01^{\circ}$ $Ch \ L = 26.53^{\circ}$ 

Notes:

- 1. All curve data is to the face of curb.
- 2. Additional right-of-way shall be provided for "T" turn-a-round.

APPROVED		CITY	/ OF
	STANDARD "T"	HILLIAR	D, OHIO
CITY ENGINEER DATE	TURN-A-ROUND	STAN CONSTRUCTI	DARD ON DRAWING
SCALE: 1/16" = 1'		1/1	ST-1



- Item 608 4" Concrete Walk
- Item Special 4" Aggregate Base (#57 Stone)
- Item 204 Subgrade Compaction

Notes:

- 1. Item numbers refer to the City of Columbus, Ohio Standard Construction and Material Specifications, Division of Engineering, current edition and all work shall be done in accordance with these specifications.
- 2. Sidewalks shall be constructed with COC-6 (Class C, Item 499) or COC-1 which shall contain 5% to 9% entrained air and a 3" maximum slump.
- 3. Where driveways cross the sidewalk, the concrete shall be 6" thick for residential driveways and 8" thick for commercial driveways. See Hilliard Standard Drawings DD-1 and DD-2.
- 4. Expansion joints shall be placed wherever new concrete touches existing construction and at intervals of 30' or less.
- 5. 5.0' min. sidewalk width is required for all new construction or retrofit in commercial mixed use areas. 4.0' min. sidewalk width may be used in retrofit situations in single family residential areas where existing sidewalks are less than 5.0'.
- 6. Water and gas valve boxes in the sidewalk area shall be adjusted to proper grade.
- 7. Roof drains shall extend under the sidewalk and through the curb. See Columbus Standard Drawing 2320.
- 8. Per City of Columbus, Item 451, all concrete shall be placed in one course and finished with an approved tool. Forms shall be made of lumber 2" nominal thickness or of equally rigid metal. Immediately after finishing, concrete shall be cured in an approved manner.
- 9. Concrete shall be protected from freezing in accordance with Section 451.071 of Item 451 when the air temperature is predicted to be below 35°F at any time during the next 72 hours.
- 10. Notify the City of Hilliard, Engineering Division at least 24 hours before concrete is to be placed for the inspection of the form work. In no case may concrete be placed without approval of the form work by the City. To schedule an inspection, refer to the contact information on Curb, Driveway Approach and Sidewalk permit.

DATE: March 06, 2023

SCALE: $\frac{1}{4}$ " = 1"

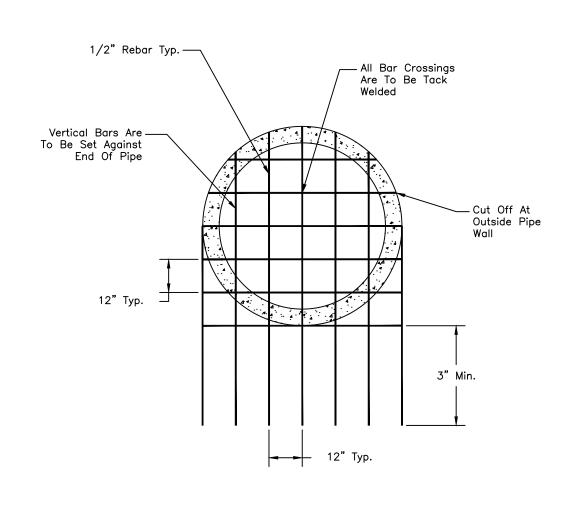
SIDEWALK SPECIFICATIONS

CITY OF HILLIARD, OHIO

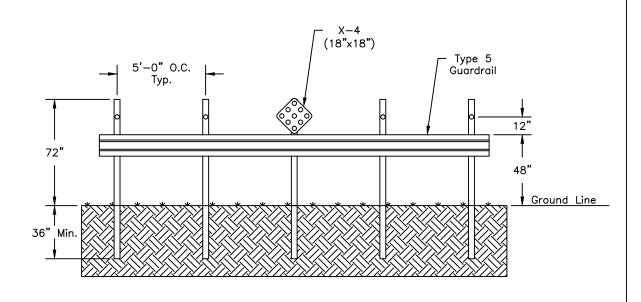
STANDARD CONSTRUCTION DRAWING

1/1

SW-1



APPROVED		CITY	/ OF
	TEMPORARY ACCESS	HILLIAR	D, OHIO
CITY ENGINEER DATE	BARRIER		DARD ON DRAWING
SCALE: 3/8" = 1'		1/1	TAB-1



5 - 4"x4" Posts With Reflector

X-4 = 18" Panel With Red High Intensity Reflective Sheeting

(Cost to be included in the unit price bid for the various items.)

APPROVED		CITY	/ OF
	TEMPORARY BARRICADE	HILLIAR	D, OHIO
CITY ENGINEER DATE	ROADWAY		DARD ON DRAWING
SCALE: 1" = 5'		1/1	TB-1

City of Hilliard Sign Specifications

Street Name Signs - General Specifications

Plan Designation: Item 630 Street Name Sign, Type (), As Per Plan

Plan Unit: Per Each

Plan Payment: Payment for each street name sign shall include brackets, stiffeners, stickers, and all incidental hardware to mount the street name sign(s) on the designated support type.

Submittals: Sign Fabricator shall submit preliminary layout of street name signs to the City of Hilliard Engineer (Ischamp@hilliardohio.gov) or the City of Hilliard sign shop (signshop@hilliardohio.gov) before manufacturing signs. Layout shall be to scale and shall include all dimensions. Failure to submit a scaled layout could result in rejection of the street name sign and replacement will be at the manufacturer's expense.

New Street Name Approval & Submittals: All new street names shall be submitted to the City of Hilliard for pre-approval. For any street name greater than ten (10) characters (including prefix or suffix), a sign layout in accordance with these specifications shall be submitted prior to pre-approval of a new street name to ensure that the street name can adequately fit on the maximum sign blade without modification to font, lettering size, or standard spacing.

The following specifications apply to all street name signs in the City of Hilliard:

- All street name signs shall be made on an aluminum sign blank (0.0080 thickness).
- All street name signs shall use a white retroreflective sheeting made with prisms (ASTM D4956 Type IV or VIII as designated for each sign type provided below) with a blue electrocut film (color: 1175 FHWA Blue) to create a blue sign with white lettering.
- Street name legends, prefixes, and suffixes shall be printed Federal Highway Administration, Office of Transportation Operations' Clearview Font Type 2-W using standard letter spacing. Legends, prefixes, and suffixes shall be centered horizontally and vertically on the sign face. If a street name contains a drop letter (y, p, j, etc.), the name shall be shifted ½" up on the sign face. Lettering sizes and clear spacing shall conform to the various sign types provided below.
- A modified Clearview Font is only permitted for existing street names in order to fit on the maximum sign blades designated for the various sign types provided below. All new street names shall comply with the standard provisions established herein.

DATE: September 12, 2022

SCALE: N.T.S.

TRAFFIC CONTROL NOTES AND DETAILS STREET NAME SIGNS

GENERAL SPECIFICATIONS

CITY OF HILLIARD, OHIO

STANDARD CONSTRUCTION DRAWING

1/10 | TC-1

City of Hilliard Sign Specifications

Street Name Signs - General Specifications (cont.)

- These standards shall apply to all public street intersections and to intersections of a
 public street with a named private driveway. Non-reflective public or private street
 name signs within the public right-of-way are prohibited on new installations. Existing
 street name signs that do not meet these standards shall be upgraded as part of the
 normal city sign maintenance schedule.
- At locations where a named private driveway intersects a public street, the word "Private" shall be positioned beneath the private street name as shown in the example below.



TRAFFIC CONTROL NOTES AND DETAILS STREET NAME SIGNS

GENERAL SPECIFICATIONS

CITY OF HILLIARD, OHIO

STANDARD CONSTRUCTION DRAWING

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TC-1

DATE: September 12, 2022

SCALE: N.T.S.

City of Hilliard Street Name Sign Reference Table

			Installation		Р	ost. Anchor &	Bracket		Sign Size & Lavout			
		<u> </u>		I					- Sig	Initial	1	
	Speed		Number of	Vertical	Post Type		Bracket Type			Upper		
	Limit of								O' DII-		4/0 !	01
		T	signs per	Clearance	(galvanized;		(galvanized;	O' DII	Sign Blade	Case	1/2-inch	Single o
	Major	Type of	intersection	of Sign		Anchor Type	black in Old	Sign Blade		Letter	Rounded	Double
Type of Intersection	Street	Mounting	(min)	from Street	Hilliard)	(galvanized)	Hilliard)	Height	Length	Height	Border	Sided
Type A - Signalized - Mast												
Arm (all new City signal		Overhead (On					Band or Cable-					
installations)	any	Mast Arm)	one per arm	on arm	N/A	N/A	Mntd	20"	96"	12"	Yes	Single
	uy	inact runny	one per ann	0.1.4.1.1.		1.07.1			-		1.00	og.c
							2 cantilevered					
			2 signs on 2				brackets &					
Type B - Signalized - Strain		Side/Corner	poles				double-tee					
Pole (existing signals or		(On Strain	(opposite				stiffeners (4					
former FCEO signals)	Any	Pole)	corners)	15'	N/A	N/A	bands per sign)	20"	72"	9"	No	Double
		0 D4			0"	2-1/4"						
		2 Posts per									N (0	
		sign (in			14 gauge	square x 42"					Yes (&	
	١	splitter	one sign per	ļ _e ,	galvanized	long; 8" min	N1/A	16"	72"	7"	chevron-	01
Type C - Roundabout	Any	islands)	splitter island	5.	w/ rain caps	lap	N/A	16"	72"	7"	arrow)	Single
Type D - Unsignalized -												
Arterial or Collector - high			1 sign @ T		2" square x	2-1/4"	2 cantilevered					
speed (includes subdivision		Side/Corner &	intersection;		12 gauge		brackets &					
street at Arterial/Collector -	40+	Cantilevered	2 signs @ X			long; 18" min						
e.g. Dublin Rd cross streets)	MPH	(On Post)	intersection	12'	w/ rain caps	llap	stiffeners	16"	72"	8"	No	Double
e.g. Dubiiii Rd cross streets)	IVIPH	(On Post)	Intersection	12	w/ rain caps	іар	suiteriers	16	12	0	INO	Double
Type E - Unsignalized -												
Arterial or Collector - low												
speed (includes subdivision			1 sign @ T		2" square x	2-1/4"	2 cantilevered					
street at Arterial/Collector -		Side/Corner &	intersection:	l	12 gauge		brackets &					
e.g. Cemetery Rd cross	25 - 35	Cantilevered	2 signs @ X	l	galvanized							l
streets)	25 - 35 MPH	(On Post)	intersection	12'	w/ rain caps	lap	stiffeners	12"	72"	6"	No	Double
streets)	IVIPTI	(On Post)	Intersection	12	w/ rain caps	іар	suiteriers	12	12	О	INO	Double
Type F - Unsignalized -		1			2" square x							
Subdivision (e.g. internal		Side/Corner &	One (2 if	l		2-1/4"	12" square post					
subdivision streets - not		Cross-	street name	l	galvanized -	square x 30"	bracket & 12"					
primary street intersection		Mounted (On	changes at	l	without rain	long; 8" min	cross piece					
with arterial or collector)	25 MPH	Post)	cross street)	10'	caps	lap	bracket	9"	60"	5"	Yes	Double
,		,								_		

Note:

SNS legends, prefixes, and suffixes shall be printed in FHWA Clearview Font Type 2-W using standard horizontal letter spacing and edge spacing. Lettering size and space reductions are permitted only on existing street names. New subdivision street names shall comply with all standards.

NOTES AND DETAILS

STREET NAME SIGNS

TRAFFIC CONTROL

REFERENCE TABLE

CITY OF HILLIARD, OHIO

STANDARD CONSTRUCTION DRAWING

3/10

TC-1

DATE: September 12, 2022

SCALE: N.T.S.

Type A Street Name Signs

Type A signs are to be installed at all signalized intersections with mast arms.

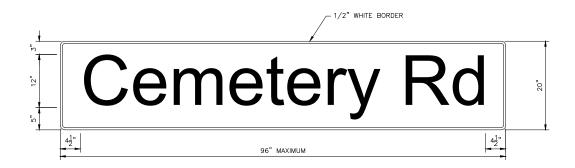
Installation. Signs shall be mounted on the mast arm. The preferred location is centered between signal heads as far left as possible over the oncoming lanes of traffic. One sign per

Brackets. No brackets are required for Type A installations. Each sign shall be mounted to the arm using a band or cable-mounted system (Astro-Brac or approved equal).

Sign Size. The sign blade shall be 20" high. Maximum sign blade length shall be 96".

Sign Material. Sign sheeting material shall comply with ASTM D4956 Type VIII (3M Diamond Grade LDP 3970, Avery Dennison MVP Prismatic T-7500, or approved equal).

Sign Layout. The initial upper case letter height shall be 12". Prefixes and suffixes shall be the same size as the legend. A 1/2-inch white border with rounded corners shall be provided. A 4 ½ -inch clear space shall be provided between the edge of the sign and the edge of the first and last letter (horizontally). The sign shall be single sided with the backs of the signs painted black.



TRAFFIC CONTROL NOTES AND DETAILS STREET NAME SIGNS

DATE: September 12, 2022

SCALE: N.T.S.

TYPE A

CITY OF HILLIARD, OHIO

STANDARD CONSTRUCTION DRAWING

4/10

Type B Street Name Signs

Type B signs are to be installed at all signalized intersections with strain poles.

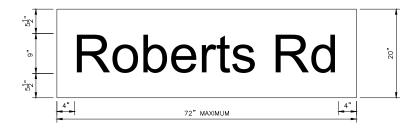
Installation. Signs shall be mounted on opposite corners on the traffic signal strain pole. Judgment may be used in determining the appropriate location based on visibility. Two signs may be installed per pole. The vertical clearance between the adjacent ground and the bottom of the lowest sign shall be 15 feet.

Brackets. Two cantilevered square brackets and double tee stiffeners (Sign-Fix, Xcessories Squared, or approved equal) shall be used. Each sign shall be banded to the vertical pole using four bands.

Sign Size. The sign blade shall be 20" high. Maximum sign blade length shall be 72".

Sign Material. Sign sheeting material shall comply with ASTM D4956 Type VIII (3M Diamond Grade LDP 3970, Avery Dennison MVP Prismatic T-7500, or approved equal).

Sign Layout. The initial upper case letter height shall be 9". Prefixes and suffixes shall be the same size as the legend. No border shall be used for signs that use cantilevered brackets for installation. A 4-inch clear space shall be provided between the edge of the sign and the edge of the first and last letter (horizontally). The sign shall be double sided.



TRAFFIC CONTROL NOTES AND DETAILS STREET NAME SIGNS

TYPE B

DATE: September 12, 2022

SCALE: N.T.S.

CITY OF HILLIARD, OHIO

STANDARD CONSTRUCTION DRAWING

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Type C Street Name Signs

Type C signs are to be installed at all roundabout locations.

Installation. Signs shall be mounted in the splitter islands with one sign per island at each leg of the roundabout. The vertical clearance between the adjacent top of curb and the bottom of the sign shall be 5 feet. The horizontal clearance between the edge of the sign and the face of the splitter island curb shall be 2' minimum.

Brackets. No brackets are used for Type C sign installations.

Post/Anchor. Type C street name sign supports shall be two 2-inch square x 14 gauge square galvanized posts with die-cut knock-outs (typical regulatory sign posts). Pyramid rain caps shall be used. A single break-away anchor shall be used for each post. Anchors shall be 2 ¼-inch square, 42 inches long, and embedded such that 2 inches of the anchor remains above ground level. The overlap of the post within the anchor sleeve shall be 8 inches minimum. For all signs installed in concrete or paver islands, a six-inch PVC pipe box out shall be provided for the post anchor. The PVC box out shall be installed prior to pouring concrete or placing pavers. After the sign post anchor is installed, granular material shall be installed between the post anchor and the PVC box out.

Sign Size. The sign blade shall be 16" high. Maximum sign blade length shall be 72".

Sign Material. Sign sheeting material shall comply with ASTM D4956 Type VIII (3M Diamond Grade LDP 3970, Avery Dennison MVP Prismatic T-7500, or approved equal).

Sign Layout. The initial upper case letter height shall be 7". Prefixes and suffixes shall be the same size as the legend. A ½-inch white border with rounded corners and a chevron-style arrow shall be provided. A 3½-inch clear space shall be provided between the edge of the sign and the edge of the first (horizontally). The sign shall be single sided.



TRAFFIC CONTROL NOTES AND DETAILS STREET NAME SIGNS

STANDARD CONSTRUCTION DRAWING

CITY OF

HILLIARD, OHIO

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TC-1

DATE: September 12, 2022

SCALE: N.T.S.

TYPE C

Type D Street Name Signs

Type D signs are to be installed at unsignalized intersections along arterial or collector streets with speed limits of 40 mph or greater. This includes intersections of a primary subdivision street and the arterial/collector street. Examples include the intersections of Alton Darby Road/Strider Lane and Dublin Road/River Landings Blvd.

Installation. At four-way intersections, two pairs of signs should be installed, mounted on opposite corners. At three-way (tee) intersections, one pair of signs should be installed. Judgment may be used in determining the appropriate location based on visibility. Two signs should be installed per pole. The vertical clearance between the adjacent ground and the bottom of the lowest sign shall be 12 feet. Signs shall be erected so that one sign does not block visibility of the other sign.

Brackets. Two cantilevered square brackets and double tee stiffeners (Sign-Fix, Xcessories Squared, or approved equal) shall be used.

Post/Anchor. Type D street name sign supports shall be 2-inch square x 12 gauge square galvanized posts with die-cut knock-outs. Pyramid rain caps shall be used. A single break-away anchor shall be used. Anchors shall be 2 1/4-inch square, 48 inches long, and embedded such that 2 inches of the anchor remains above ground level. The overlap of the post within the anchor sleeve shall be 18 inches minimum. In addition, an Omni Anchor (manufactured by MD Solutions, Inc.) or approved equal shall be used for all Type D sign installations. Size of anchor shall be per manufacturer's recommendations based on sign loading and soil conditions.

Sign Size. The sign blade shall be 16" high. Maximum sign blade length shall be 72".

Sign Material. Sign sheeting material shall comply with ASTM D4956 Type VIII (3M Diamond Grade LDP 3970, Avery Dennison MVP Prismatic T-7500, or approved equal).

Sign Layout. The initial upper case letter height shall be 8". Prefixes and suffixes shall be the same size as the legend. No border shall be used for signs that use cantilevered brackets for installation. A 4-inch clear space shall be provided between the edge of the sign and the edge of the first and last letter (horizontally). The sign shall be double sided.



TRAFFIC CONTROL
NOTES AND DETAILS
STREET NAME SIGNS

TYPE D

CITY OF HILLIARD, OHIO

STANDARD CONSTRUCTION DRAWING

7/10

TC-1

DATE: September 12, 2022

SCALE: N.T.S.

Type E Street Name Signs

Type E signs are to be installed at unsignalized intersections along arterial or collector streets with speed limits of 35 mph or less. This includes intersections of a primary subdivision street and the arterial/collector street. Examples include the intersections of Avery Rd/Dixon Dr, Davidson Road/Heather Ridge Dr, and Scioto Darby Rd/Hoffman Farms Dr

Installation. At four-way intersections, two pairs of signs should be installed, mounted on opposite corners. At three-way (tee) intersections, one pair of signs should be installed. Judgment may be used in determining the appropriate location based on visibility. Two signs should be installed per pole. The vertical clearance between the adjacent ground and the bottom of the lowest sign shall be 12 feet. Signs shall be erected so that one sign does not block visibility of the other sign.

Brackets. Two cantilevered square brackets and double tee stiffeners (Sign-Fix, Xcessories Squared, or approved equal) shall be used.

Post/Anchor. Type E street name sign supports shall be 2-inch square x 12 gauge square galvanized posts with die-cut knock-outs. Pyramid rain caps shall be used. A single break-away anchor shall be used. Anchors shall be 2 1/4-inch square, 48 inches long, and embedded such that 2 inches of the anchor remains above ground level. The overlap of the post within the anchor sleeve shall be 18 inches minimum. In addition, an Omni Anchor (manufactured by MD Solutions, Inc.) or approved equal shall be used for all Type D sign installations. Size of anchor shall be per manufacturer's recommendations based on sign loading and soil conditions.

Sign Size. The sign blade shall be 12" high. Maximum sign blade length shall be 72".

Sign Material. Sign sheeting material shall comply with ASTM D4956 Type VIII (3M Diamond Grade LDP 3970, Avery Dennison MVP Prismatic T-7500, or approved equal).

Sign Layout. The initial upper case letter height shall be 6". Prefixes and suffixes shall be the same size as the legend. No border shall be used for signs that use cantilevered brackets for installation. A 3-inch clear space shall be provided between the edge of the sign and the edge of the first and last letter (horizontally). The sign shall be double sided.



DATE: September 12, 2022

SCALE: N.T.S.

TRAFFIC CONTROL NOTES AND DETAILS STREET NAME SIGNS

TYPE E

CITY OF HILLIARD, OHIO

STANDARD CONSTRUCTION DRAWING

8/10

Type F Street Name Signs

Type F signs are to be installed at unsignalized intersections within subdivisions with speed limits of 25 mph only. Type F signs apply to internal neighborhood streets, not the intersection of the primary subdivision street and the arterial/collector street.

Installation. One pair of signs should be installed unless the street name changes on either side of a street. Judgment may be used in determining the appropriate location based on visibility. Two signs should be installed per post. The vertical clearance between the adjacent ground and the bottom of the lowest sign shall be 10 feet.

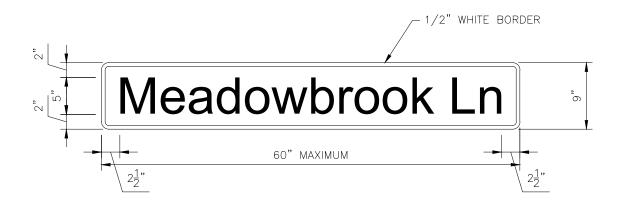
Brackets. One 12-inch square post bracket and one 12-inch cross piece bracket shall be used. Note: Type F signs are mounted using a cross-mounted system, not cantilevered like Type D and Type E street name signs.

Post/Anchor. Type F street name sign supports shall be 2-inch square x 12 gauge square galvanized posts with die-cut knock-outs. Pyramid rain caps are not used. A single break-away anchor shall be used. Anchors shall be 2 ½-inch square, 30 inches long, and embedded such that 2 inches of the anchor remains above ground level. The overlap of the post within the anchor sleeve shall be 8 inches minimum.

Sign Size. The sign blade shall be 9" high. Maximum sign blade length shall be 60".

Sign Material. Sign sheeting material shall comply with ASTM D4956 Type IV (3M High Intensity Prismatic 3930, Avery Dennison High Intensity Prismatic T-6500, or approved equal).

Sign Layout. The initial upper case letter height shall be 5". Prefixes and suffixes shall be the same size as the legend. A $\frac{1}{2}$ -inch white border with rounded corners shall be provided. A $\frac{1}{2}$ -inch clear space shall be provided between the edge of the sign and the edge of the first and last letter (horizontally). The sign shall be double sided.



DATE: September 12, 2022

SCALE: N.T.S.

TRAFFIC CONTROL NOTES AND DETAILS STREET NAME SIGNS

TYPE F

CITY OF HILLIARD, OHIO

STANDARD CONSTRUCTION DRAWING

9/10

Street Name Sign Support and Anchor Specifications

Plan Designation: Item 630 Street Name Sign Support and Anchor (Type ____), As Per Plan

Plan Unit: Per Each

Plan Payment: Payment for each street name sign support shall include the appropriate length anchor and the appropriate post length required to obtain the required minimum lap length and the proper vertical clearance for the various street name sign types. Payment for the sign supports shall include the pyramid rain caps, rivets, bolts, nuts, and all incidental hardware needed for a complete installation.

Type A Street Name Sign Supports and Anchors. Type A street name signs are installed on mast arms at signalized intersections. A separate support and anchor are not required.

Type B Street Name Sign Supports and Anchors. Type B street name signs are installed on strain poles at signalized intersections. A separate support and anchor are not required.

Type C Street Name Sign Supports and Anchors. Type C street name sign supports shall be two 2-inch square x 14 gauge square galvanized posts with die-cut knock-outs (typical regulatory sign posts). Pyramid rain caps shall be used. A single break-away anchor shall be used for each post. Anchors shall be 2 ½-inch square, 42 inches long, and embedded such that 2 inches of the anchor remains above ground level. The overlap of the post within the anchor sleeve shall be 8 inches minimum. For all signs installed in concrete or paver islands, a six-inch PVC pipe box out shall be provided for the post anchor. The PVC box out shall be installed prior to pouring concrete or placing pavers. After the sign post anchor is installed, granular material shall be installed between the post anchor and the PVC box out.

Type D Street Name Sign Supports and Anchors. Type D street name sign supports shall be 2-inch square x 12 gauge square galvanized posts with die-cut knock-outs. Pyramid rain caps shall be used. A single break-away anchor shall be used. Anchors shall be 2 ½-inch square, 48 inches long, and embedded such that 2 inches of the anchor remains above ground level. The overlap of the post within the anchor sleeve shall be 18 inches minimum.

Type E Street Name Sign Supports and Anchors. Type E street name sign supports shall be 2-inch square x 12 gauge square galvanized posts with die-cut knock-outs. Pyramid rain caps shall be used. A single break-away anchor shall be used. Anchors shall be 2 1/4-inch square, 48 inches long, and embedded such that 2 inches of the anchor remains above ground level. The overlap of the post within the anchor sleeve shall be 18 inches minimum.

Type F Street Name Sign Supports and Anchors. Type F street name sign supports shall be 2-inch square x 12 gauge square galvanized posts with die-cut knock-outs. Pyramid rain caps are not used. A single break-away anchor shall be used. Anchors shall be 2 ½-inch square, 30 inches long, and embedded such that 2 inches of the anchor remains above ground level. The overlap of the post within the anchor sleeve shall be 8 inches minimum.

Old Hilliard District. In the Old Hilliard District, the above street name sign support and anchor specification apply except all sign supports and hardware shall be black.

Conservation District. In the Conservation District, the type C-F street name sign support and anchor specifications for unsignalized intersections are per Hilliard standard construction drawing TC-3. The vertical clearance and installation requirements provided herein the table on sheet 3/10 apply.

TRAFFIC CONTROL NOTES AND DETAILS

STREET NAME SIGNS

SUPPORT & ANCHOR SPECIFICATIONS

CITY OF HILLIARD, OHIO

STANDARD CONSTRUCTION DRAWING

10/10

TC-1

DATE: September 12, 2022

SCALE: N.T.S.

Regulatory, Warning, and Guide Signs - General Specifications

Plan Designation: Item 630 Sign, Flat Sheet (ASTM Type ____), As Per Plan

Plan Unit: Per SF

Plan Payment: Payment for Sign, Flat Sheet shall be per square foot and shall include the City of Hilliard identification stickers.

All sign installations shall include a City of Hilliard identification sticker, which provides the month and year that the sign is installed. Stickers shall be obtained from the City of Hilliard sign shop (contact: Dave Dale (614) 334-2355).

Sign Material. Sign sheeting material shall comply with ASTM D4956 Type VIII (3M Diamond Grade LDP 3970, Avery Dennison MVP Prismatic T-7500, or approved equal) for the following types of signs:

- · School Zone Speed Limit signs
- School Crossing/Warning signs and placards
- Pedestrian and Bicycle Warning signs
- · STOP signs along or intersecting arterial/collector streets
- YIELD signs at roundabouts

Sign sheeting material shall comply with ASTM D4956 Type IV (3M High Intensity Prismatic 3930, Avery Dennison High Intensity Prismatic T-6500, or approved equal) for all other types of signs.

Reflective Strips. 2-inch wide reflective sheeting strips shall be used on all sign posts located in raised medians for emphasis and to increase visibility; these reflective strips may be used on sign posts at other locations as determined by the City of Hilliard.

DATE: July 29, 2015

SCALE: N.T.S.

TRAFFIC CONTROL NOTES AND DETAILS

REGULATORY, WARNING & GUIDE SIGNS

GENERAL SPECIFICATIONS

CITY OF HILLIARD, OHIO

STANDARD CONSTRUCTION DRAWING

1/2 TC-2

Regulatory, Warning, and Guide Signs - Support and Anchor Specifications

Plan Designation: Item 630 Ground Mounted Sign Support, As Per Plan

Plan Unit: Per Linear Foot

Plan Payment: Payment for each ground mounted sign support shall include the appropriate length post to obtain an 8-inch minimum lap length into the anchor and the proper vertical clearance as indicated below. Payment for the sign supports shall include the anchors, pyramid rain caps, rivets, bolts, nuts, and all incidental hardware needed for a complete installation.

Sign Supports. All sign supports shall be 2-inch by 14 gauge square galvanized posts with die cut knockouts (Telespar quik-punch signposts or approved equal) and a single breakaway anchor. Pyramid rain caps shall be used.

Anchors. Anchors shall be 2 ¼-inch square, 42 inches long, and embedded such that 2 inches of the anchor remains above ground level. The overlap of the post within the anchor sleeve shall be 8 inches minimum. For all signs installed in concrete or paver islands, a six-inch PVC pipe box out shall be provided for the post anchor. The PVC box out shall be installed prior to pouring concrete or placing pavers. After the sign post anchor is installed, granular material shall be installed between the post anchor and the PVC box out.

Vertical Clearance. Signs shall be erected with a 7-foot vertical clearance between the edge of the pavement or top of curb and the bottom of the primary sign, unless otherwise stated in the plans. For signs with more than one sign on a post, the vertical clearance for any secondary sign or placard may be between 5 feet and 7 feet. No signs shall be erected with less than a 5-foot vertical clearance.

Horizontal Clearance. Horizontal clearance for both curb and open ditch street sections shall be per OMUTCD standards.

Old Hilliard District. In the Old Hilliard District, the above sign supports and anchor specifications apply except all sign supports and hardware shall be black.

Conservation District. In the Conservation District, the sign support and anchor specifications are per Hilliard standard construction drawing TC-3. The vertical and horizontal clearance and installation requirements herein apply.

TRAFFIC CONTROL NOTES AND DETAILS

REGULATORY, WARNING & GUIDE SIGNS

SUPPORT & ANCHOR SPECS

CITY OF HILLIARD, OHIO

STANDARD CONSTRUCTION DRAWING

2/2 TC-2

DATE: July 29, 2015

SCALE: N.T.S.

ITEM 631 SCHOOL SPEED LIMIT SIGN ASSEMBLY, AS PER PLAN EACH SCHOOL SPEED LIMIT SIGN ASSEMBLY SHALL CONSIST OF TWO (2) 12" LED FLASHING YELLOW BEACONS (GELCORE #DR6YTFB23B OR APPROVED EQUAL), A S5-H1 SIGN, A 50 TO 60 WATT SOLAR PANEL, A GROUND ROD, AND A CABINET CONTAINING AN ELTEC NTC-17E TIME SWITCH #861501 OR APPROVED EQUAL, AN ELTEC F2 FLASHER OR APPROVED EQUAL, A 100 AH SEALED GEL BATTERY OR APPROVED EQUAL, A MORNINGSTAR PROSTAR SOLAR CONTROLLER OR APPROVED EQUAL, AN AUTO-ON/AUTO-OFF SWITCH, A DIMMER CONTROL, AND ALL WIRING AND OTHER EQUIPMENT NECESSARY FOR INSTALLATION AND OPERATION.

THIS ASSEMBLY SHALL BE MOUNTED ON A 15' PEDESTAL WITH A TRANSFORMER BASE AND POLE CAP. THE PEDESTAL, TRANSFORMER BASE, CAP, CABINET, BEACON HOUSINGS, SOLAR PANEL HOUSING, AND ALL MOUNTING HARDWARE SHALL BE DARK BRONZE (FEDERAL COLOR NO. 595–37056). THE PEDESTALS SHALL BE GALVANIZED AND POWDER COATED OR PAINTED USING A FOUR-PART EPOXY PAINT SYSTEM (AMERON'S AMER-LOC PROCESS OR APPROVED EQUAL)

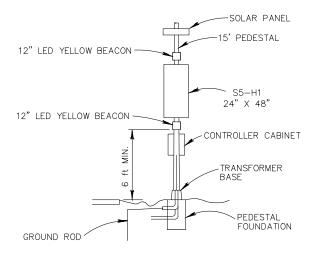
THE S5-H1 SIGN SHALL BE 24" X 48". THE SIGN SHALL READ "SCHOOL SPEED LIMIT 20 DURING RESTRICTED HOURS." THE BACKGROUND FOR THE WORD "SCHOOL" SHALL BE FLOURESCENT YELLOW-GREEN IN COLOR. THE REMAINING ASPECTS OF THE SIGN SHALL BE PER ODOT STANDARDS.

THE SOLAR PANEL SHALL FACE DUE SOUTH AT APPROXIMATELY A 45" ANGLE TO THE SKY, THE SOLAR PANEL SHALL HAVE A CLEAR VIEW OF THE SKY, FREE AND CLEAR OF ANY OBSTRUCTIONS, FOR OPTIMUM PERFORMANCE.

THE FOLLOWING ASSEMBLIES SHALL FLASH __ _P.M. SCHOOL DAYS. AND

ALL SCHOOL DAY EXCEPTIONS AND LATE START DAYS FOR THE CURRENT SCHOOL YEAR SHALL BE OBTAINED FROM THE ENGINEER AND PROGRAMMED INTO THE TIMER BY THE

PAYMENT FOR THIS ITEM SHALL BE AT THE CONTRACT UNIT PRICE FOR EACH "SCHOOL SPEED LIMIT SIGN ASSEMBLY, AS PER PLAN," COMPLETE AND IN PLACE, INCLUDING ALL CONNECTIONS, TESTED AND ACCEPTED.



DATE: July 29, 2015

SCALE: N.T.S.

TRAFFIC CONTROL NOTES AND DETAILS

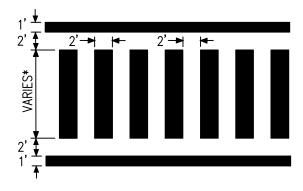
SCHOOL ZONE FLASHER ASSEMBLY

CITY OF HILLIARD, OHIO

STANDARD CONSTRUCTION DRAWING

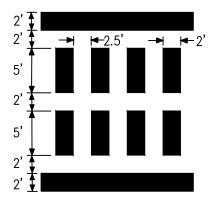
1/1

HIGH-VISIBILITY CROSSWALK DETAIL



*LENGTH OF LADDER STRIPE IS DEPENDENT ON WIDTH OF CROSSING AND AMOUNT OF PED/BIKE TRAFFIC.

HIGH-VISIBILITY CROSSWALK DETAIL AT MAJOR TRAIL CROSSINGS



6' MIN. FOR SIDEWALK CROSSINGS.

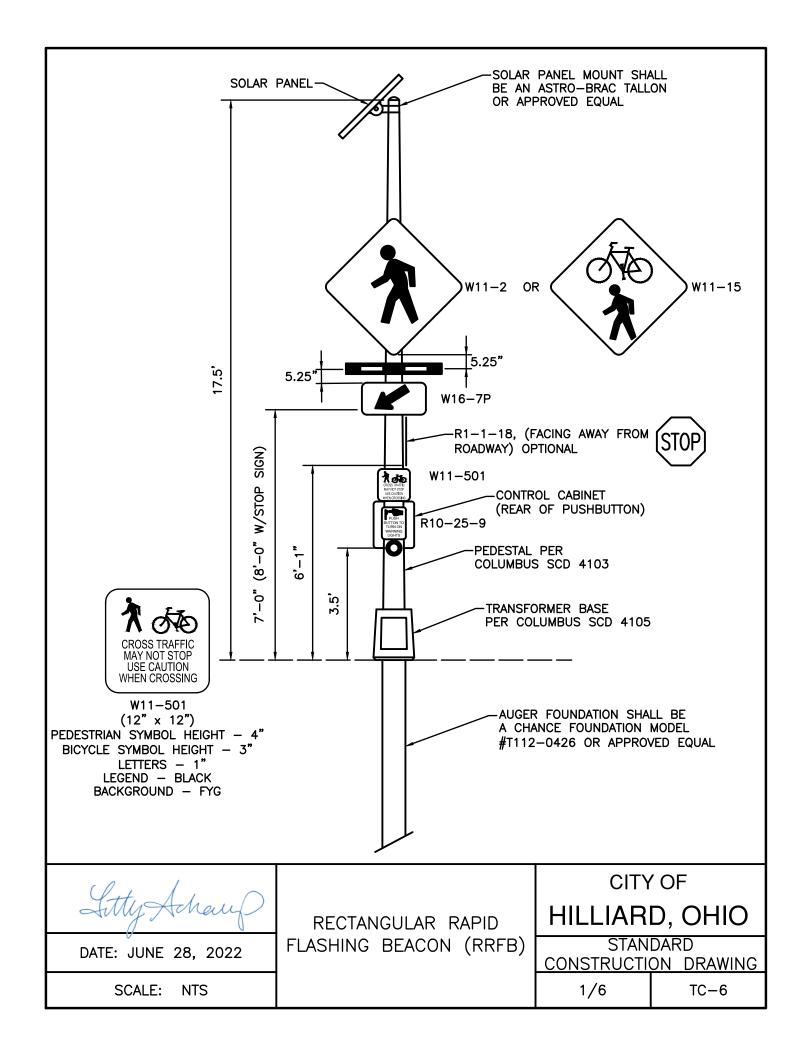
DATE: June 14, 2016

SCALE: N.T.S. **HIGH VISIBILITY CROSSWALK DETAILS**

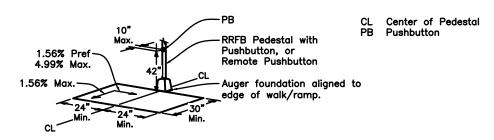
CITY OF HILLIARD, OHIO

STANDARD CONSTRUCTION DRAWING

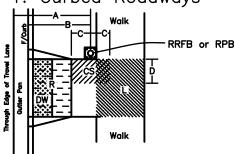
1/1



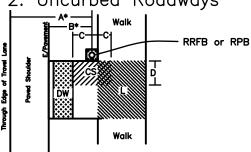
Pushbutton Clear Space Detail



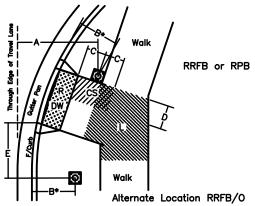
1: Curbed Roadways



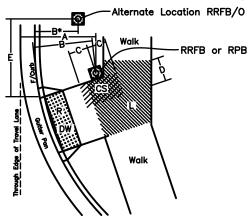
Uncurbed Roadways



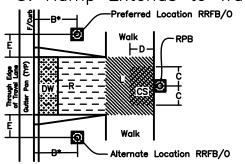
3: Curbed within Radius (1/2)



4: Curbed within Radius (2/2)



5: Ramp Extends to Walk



NOTES:

- Clear Space may overlap landing. Where present, width of paved
- shoulder may vary. RRFB beacons and signs not shown for clarity.
- Parallel (not shown) ramps may be required but are not shown.
 - Pushbutton locations shall comply with PROWAG X02.5. Pushbutton must be 30" to 10' from the back of curb. Where one ramp is used, pushbuttons must placed within 24" of the top corner of the ramp. Where two ramps are used with a transition landing, pushbuttons are to be adjacent to the landing.

8' Pref, 6' MIN 8.5' Pref, 6.5' MIN 4' MIN (6.5' shown) 4' MIN (4.5' shown) В **B*** 2' MIN С

D 2.5' MIN 10' Max Clear Space ADA Landing

RPB

Detectable Warning Surface **RRFB** RRFB Pedestal with **Pushbutton** RRFB/O RRFB Pedestal without **Pushbutton**

Remote Pushbutton Pedestal per SCD 4100 for use with RRFB/O

RECTANGULAR RAPID FLASHING BEACON (RRFB)

DATE: JUNE 28, 2022

SCALE: NTS

PLACEMENT DETAILS

CITY OF

HILLIARD, OHIO

STANDARD CONSTRUCTION DRAWING

2/6

ITEM 630 SIGNING MISC.: RECTANGULAR RAPID FLASHING BEACON (RRFB) SIGN ASSEMBLY

THIS WORK SHALL CONSIST OF FURNISHING AND INSTALLING A RECTANGULAR RAPID FLASHING BEACON (RRFB) SIGN ASSEMBLY. THE FLASHING UNIT SHALL BE LED AND PEDESTRIAN ACTIVATED. MULTIPLE UNITS SHALL BE WIRELESSLY CONTROLLED AND SYNCHRONIZED. THE UNIT SHALL BE COMPLIANT WITH THE MOST CURRENT OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (OMUTCD) EDITION AND REVISION AND FHWA INTERIM APPROVAL FOR RRFBS (IA-21).

GENERAL REQUIREMENTS

EACH RRFB SHALL CONSIST OF TWO RAPIDLY AND ALTERNATELY FLASHING RECTANGULAR YELLOW INDICATIONS HAVING LED ARRAY BASED PULSING LIGHT SOURCES.

EACH RRFB SHALL BE A COMPLETE ASSEMBLY, CONSISTING OF BUT NOT LIMITED TO A PEDESTAL, TRANSFORMER BASE AND FOUNDATION, SIGNAGE, SIGN MOUNTING HARDWARE, INDICATIONS AND ELECTRICAL COMPONENTS (WIRING, SOLID—STATE CIRCUIT BOARDS, ETC.).

ALL FASTENERS USED SHALL BE ANTI-VANDAL.

FUNCTIONAL REQUIREMENTS

EACH RRFB SHALL BE ACTIVATED BY ADA COMPLIANT PUSHBUTTONS.

THE RRFB SHALL BE NORMALLY DARK, SHALL INITIATE OPERATION ONLY UPON PEDESTRIAN ACTUATION, AND SHALL CEASE OPERATION AFTER A PREDETERMINED TIME LIMIT (BASED ON OMUTCD PROCEDURES).

WHEN ACTIVATED, THE RRFB UNIT INDICATIONS SHALL FLASH IN A PATTERN COMPLIANT WITH THE CURRENT OMUTCD REQUIREMENTS.

ALL RRFB LIGHT INDICATIONS SHALL BE SYNCHRONIZED (ALL LIGHTS WILL TURN ON WITHIN 120 MSEC AND REMAIN SYNCHRONIZED THROUGHOUT THE DURATION OF THE FLASHING CYCLE).

EACH OF THE RRFB'S INDICATIONS SHALL FLASH AT A RATE COMPLIANT WITH THE CURRENT OMUTCD REQUIREMENTS.

THE UNIT SHALL BE LOW CURRENT/HIGH OUTPUT INCLUDING AUTOMATIC DIMMING CAPABILITIES FOR DAY AND NIGHT VISIBILITY.

MATERIALS

FURNISH A COMPLETE ASSEMBLY, CONSISTING OF BUT NOT LIMITED TO, SIGNAGE, SIGN MOUNTING HARDWARE, INDICATIONS, AND ELECTRICAL COMPONENTS (WIRING, SOLID-STATE CIRCUIT BOARDS, ETC.). THE RRFB ASSEMBLY INCLUDES THE FOLLOWING ITEMS:

1. RRFB INDICATIONS

- A. EACH RRFB INDICATION LENS SHALL BE A MINIMUM SIZE OF APPROXIMATELY 5" WIDE X 2" HIGH.
- B. THE RRFB INDICATIONS SHALL BE ALIGNED HORIZONTALLY, WITH THE LONGER DIMENSION OF THE INDICATION HORIZONTAL. THERE SHALL BE TWO INDICATIONS ON THE SIDE FACING TRAFFIC.
- C. EACH RRFB SHALL BE SUPPLIED WITH ALL REQUIRED HARDWARE TO INSTALL ASSEMBLY. ALL EXPOSED HARDWARE SHALL BE ANTI-VANDAL AND STAINLESS STEEL.
- D. THE LIGHT INTENSITY OF THE YELLOW INDICATIONS SHALL MEET THE MINIMUM CLASS 1 SPECIFICATIONS OF SOCIETY OF AUTOMOTIVE ENGINEERS (SAE) STANDARD J595 (DIRECTIONAL FLASHING OPTICAL WARNING DEVICES FOR AUTHORIZED EMERGENCY, MAINTENANCE, AND SERVICE VEHICLES) DATED JANUARY, 2005.
- E. A SMALL LED CONFIRMATION LIGHT DIRECTED AT AND VISIBLE TO PEDESTRIANS IN THE CROSSWALK SHALL BE INSTALLED INTEGRAL TO THE RRFB OR PUSHBUTTON TO GIVE CONFIRMATION THAT THE RRFB IS IN OPERATION.

2. POLE AND BASE

- A. MOUNT ON A POLE CONFORMING TO COLUMBUS STANDARD CONSTRUCTION DRAWING (SCD) 4103 ATOP A TRANSFORMER BASE CONFORMING TO COLUMBUS SCD 4105 AND AN AUGER FOUNDATION (CHANCE FOUNDATION MODEL #T112-0426 OR APPROVED FOLIAL)
- B. THE POLE SHALL BE PROVIDED AND FIELD ADJUSTED TO MAINTAIN THE PROPER SIGN MOUNTING HEIGHTS.
- C. UNLESS SPECIFIED OTHERWISE IN THE PLANS, POLE AND BASE MANUFACTURER SHALL BE LISTED ON COLUMBUS' QUALIFIED PRODUCTS LIST.
- D. POLE SHALL BE POWDER-COATED DARK BRONZE EXCEPT IN OLD HILLIARD WHERE IT SHALL BE POWDER-COATED BLACK.

DATE: JUNE 28, 2022

SCALE: NTS

CITY OF
HILLIARD, OHIO

STANDARD
CONSTRUCTION DRAWING

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3. SIGNS

- A. SINGLE—SIDED RRFB UNITS SHALL INCLUDE ONE W11—2 (OR W11—15) SIGN WITH A W16—7P OR OTHER DESIGNATED SUPPLEMENTAL SIGN. DOUBLE—SIDED RRFB UNITS SHALL HAVE TWO SET OF THESE SIGNS MOUNTED BACK—TO—BACK. UNLESS MOUNTED IN THE MEDIAN, REAR—FACING SIGNS SHALL BE ORIENTED WITH A 10° SKEW TO FACE TRAFFIC.
- B. ASSURE SIGNS MEET THE REQUIREMENTS OF C&MS 630. W11-2 (OR W11-15) SIGNS SHALL BE SECURED TO THE POLE WITH A MINIMUM OF TWO (2) BOLTS AND WASHERS AND SHALL BE SIZED AS FOLLOWS:
 - i. SINGLE-LANE APPROACH, 25-40 MPH 30" (2 BOLTS REQUIRED).
 - ii. SINGLE-LANE APPROACH, 45+ MPH 36" (3 BOLTS REQUIRED).
 - iii. MULTI-LANE APPROACH 36" (3 BOLTS REQUIRED).
 - iv. THE W16-7P SIGN SHALL BE 24" IN WIDTH.
- C. ALL WARNING SIGNS SHALL HAVE A FLUORESCENT YELLOW-GREEN BACKGROUND.
- D. ALL SIGNS AND RRFB INSTALLATIONS SHALL BE DOUBLE-SIDED UNLESS OTHERWISE CALLED OUT IN THE PLAN.
- E. ALL SIGNS SHALL BE SECURED TO THE POLES USING STAINLESS STEEL BANDING AND BRACKETS. FIELD DRILLING OF POLES IS NOT PERMITTED.

4. CONTROL CIRCUIT

- A. WHEN ACTIVATED, THE TWO YELLOW INDICATIONS IN EACH RRFB SHALL FLASH IN A PATTERN COMPLIANT WITH CURRENT OMUTCD REQUIREMENTS.
- B. THE CONTROL CIRCUIT SHALL HAVE THE CAPABILITY OF INDEPENDENTLY FLASHING UP TO TWO INDEPENDENT OUTPUTS. THE LED LIGHT OUTPUTS AND FLASH PATTERN SHALL BE COMPLETELY PROGRAMMABLE.
- C. THE CONTROL CIRCUIT SHALL BE SEALED WATERTIGHT TO ELIMINATE DIRT CONTAMINATION AND ALLOW FOR SAFE HANDLING IN ALL WEATHER CONDITIONS.
- D. THE LEDS SHALL BE SEALED AGAINST DUST AND MOISTURE INTRUSION AS PER THE REQUIREMENTS OF NEMA STANDARD 250-1991 FOR TYPE 4 ENCLOSURE AND TO PROTECT ALL INTERNAL LED AND ELECTRICAL COMPONENTS.

5. POWER

A. SOLAR-POWERED UNITS

- i. BATTERY UNIT SHALL BE A 12VDC, 40 AHR MINIMUM, SEALED GEL OR AGM LEAD ACID BATTERY. BATTERIES SHALL HAVE A WRITTEN TWO YEAR FULL REPLACEMENT WARRANTY.
- II. THE SOLAR PANEL SHALL PROVIDE A MINIMUM OF 55 WATTS PEAK TOTAL OUTPUT, OR SHOW THAT AN ALTERNATE PEAK TOTAL OUTPUT WORKS AND MEETS THE REMAINDER OF DESIGN REQUIREMENTS.
- iii. THE SOLAR PANEL SHALL BE MOUNTED TO AN ALUMINUM PLATE AT A 45 DEGREE ANGLE (SOUTH FACING) TO PROVIDE MAXIMUM OUTPUT, AND SHALL BE MOUNTED TO THE SIDE OF THE POLE. TOP MOUNTING IS NOT PERMITTED. ALL BRACKETS SHALL BE STAINLESS STEEL.
- iv. THE UNIT SHALL BE CAPABLE OF RUNNING UP TO 30 DAYS WITHOUT SUNLIGHT.
- v. EACH REMOTE RRFB UNIT SHALL BE WIRELESSLY ACTIVATED.
- vi. RADIO CONTROL SHALL OPERATE ON A 900 MHZ FREQUENCY HOPPING SPREAD SPECTRUM NETWORK, WI-FI OR APPROVED EQUAL.
- vii. RADIO SHALL INTEGRATE COMMUNICATION OF RRFB CONTROL CIRCUIT TO ACTIVATE SIGN FROM PUSHBUTTON INPUT.
- VIII. THE RADIO SHALL BE SYNCHRONIZED SO ALL OF THE REMOTE RRFB LIGHT INDICATIONS WILL TURN ON WITHIN 120 MSEC OF EACH OTHER AND REMAIN SYNCHRONIZED THROUGH-OUT THE DURATION OF THE FLASHING CYCLE.
- ix. RADIO SYSTEMS SHALL OPERATE FROM: 3VDC TO 15VDC.

6. PUSHBUTTON

- A. PEDESTRIAN PUSHBUTTONS SHALL BE IN COMPLIANCE WITH THE AMERICANS WITH DISABILITIES ACT (ADA). ONE ALUMINUM SIGN SHALL BE SUPPLIED WITH EACH PUSHBUTTON. PUSHBUTTONS ARE TO BE MOUNTED 42" ABOVE GROUND LEVEL.
- B. PEDESTRIAN PUSHBUTTONS SHALL BE PRESSURE ACTIVATED WITH A NON-MOVING BUTTON AND PROVIDE BOTH A TWO-TONE AUDIBLE BEEP AND VISIBLE, MOMENTARY LED TO NOTIFY THE USER THAT THE SWITCH WAS ACTIVATED. AN ACCEPTABLE PUSHBUTTON SHALL BE THE BULLDOG III, MANUFACTURED BY POLARA ENGINEERING, INC., OR APPROVED EQUAL. THE OUTER HOUSING COLOR SHALL BE BLACK AND THE BUTTON SHALL BE SILVER. A CLEAR BEAD OF SILICON SEALANT SHALL BE APPLIED TO THE TOP OF THE PUSHBUTTON HOUSING (1 INCH EACH SIDE OF TOP CENTER) AGAINST THE POLE TO PREVENT WATER FROM ENTERING THE BACK OF THE PUSHBUTTON HOUSING.
- C. WHEN A REMOTE PUSHBUTTON IS CALLED FOR IN THE PUSHBUTTON, R10-25-9 AND W11-501-12 SIGNS SHALL BE INSTALLED ON A 5-FOOT PEDESTAL (PER COLUMBUS SCD 4100, MOUNTED ON A FOUNDATION PER COLUMBUS SCD 4163, POWDER-COATED AS PER MATERIALS SECTION 2 OF THIS SPECIFICATION) IN LIEU OF PLACEMENT ON THE RRFB SUPPORT. A 2-INCH SCHEDULE 80 CONDUIT SHALL BE INSTALLED BETWEEN THE RRFB SUPPORT AND 5-FOOT PEDESTAL, BURIED 24" DEEP. 2-CONDUCTOR #14 AWG WIRE SHALL RUN FROM THE PUSHBUTTON, THROUGH THE PEDESTAL, CONDUIT, AND RRFB SUPPORT AND CONNECTED TO THE CONTROLLER PER THE MANUFACTURER'S RECOMMENDATIONS.

RECTANGULAR RAPID
FLASHING BEACON (RRFB)

Output

Date: June 28, 2022

GENERAL NOTES

SCALE: NTS

CITY OF
HILLIARD, OHIO

STANDARD
CONSTRUCTION DRAWING

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7. RRFB PEDESTAL AND PUSHBUTTON PLACEMENT

- A. MOTORISTS SHALL HAVE AN UNOBSTRUCTED VIEW OF THE RRFB BEACON AND SIGNS, STARTING FROM STOPPING SIGHT DISTANCE (SSD) TO THE LEADING EDGE OF THE CROSSWALK.
- B. IF A R5-1 "YIELD [ARROW] TO PEDESTRIANS" SIGN IS USED, ADJUST ITS HORIZONTAL OFFSET TO NOT BLOCK VIEW OF THE RRFB BEACON AND SIGNS. THE CITY ENGINEER IS TO REVIEW AND APPROVE FIELD-MARKED LOCATIONS OF SIGNS PRIOR TO INSTALLATION.
- C. WHERE OBSTRUCTIONS CANNOT BE REMOVED OR RELOCATED, A REMOTE PUSHBUTTON MAY BE USED IN ITS PLACE. THE RRFB PEDESTAL MAY BE PLACED CLOSER TO THE ROADWAY, UP TO 10 FEET IN ADVANCE OF THE LEADING CROSSWALK LINE OR 5 FEET BEHIND THE TRAILING CROSSWALK LINE.
- D. AT NO POINT SHALL THE EDGE OF A SIGN BE LOCATED LESS THAN TWO FEET FROM THE FACE OF CURB OR EDGE OF PAVED SHOULDER.

CONSTRUCTION

THE RRFB SHALL BE ASSEMBLED AND CONSTRUCTED BY THE CONTRACTOR AS SHOWN AND SPECIFIED ON THE PLANS.

WARRANTY

WARRANTY SHALL BE TWO YEARS FROM THE DATE OF FINAL ACCEPTANCE.

MEASUREMENT

THE CITY WILL MEASURE THE ITEM COMPLETE IN PLACE, INCLUDING ALL MATERIALS, TESTING, LABOR AND SOFTWARE FOR A FULLY FUNCTIONAL UNIT. A MINIMUM OF TWO (2) RRFB SIGN ASSEMBLIES ARE REQUIRED FOR EACH CROSSWALK INSTALLATION.

PAYMENT

PAYMENT WILL BE AT THE CONTRACT UNIT PRICE PER EACH FOR ITEM 630 SIGNING MISC.: SOLAR POWERED RECTANGULAR RAPID FLASHING BEACON (RRFB) SIGN ASSEMBLY, 2—SIDED (UNLESS OTHERWISE CALLED OUT IN THE PLAN); ITEM 630 SIGNING MISC.: REMOTE WIRED PUSHBUTTON ON PEDESTAL.

UNIT PRICE SHALL INCLUDE ALL LABOR, MATERIALS, AND INCIDENTALS TO FURNISH AND INSTALL THE SPECIFIED UNIT AT THE SPECIFIED LOCATION AND PER THE STANDARD DRAWING.

RECTANGULAR RAPID
FLASHING BEACON (RRFB)

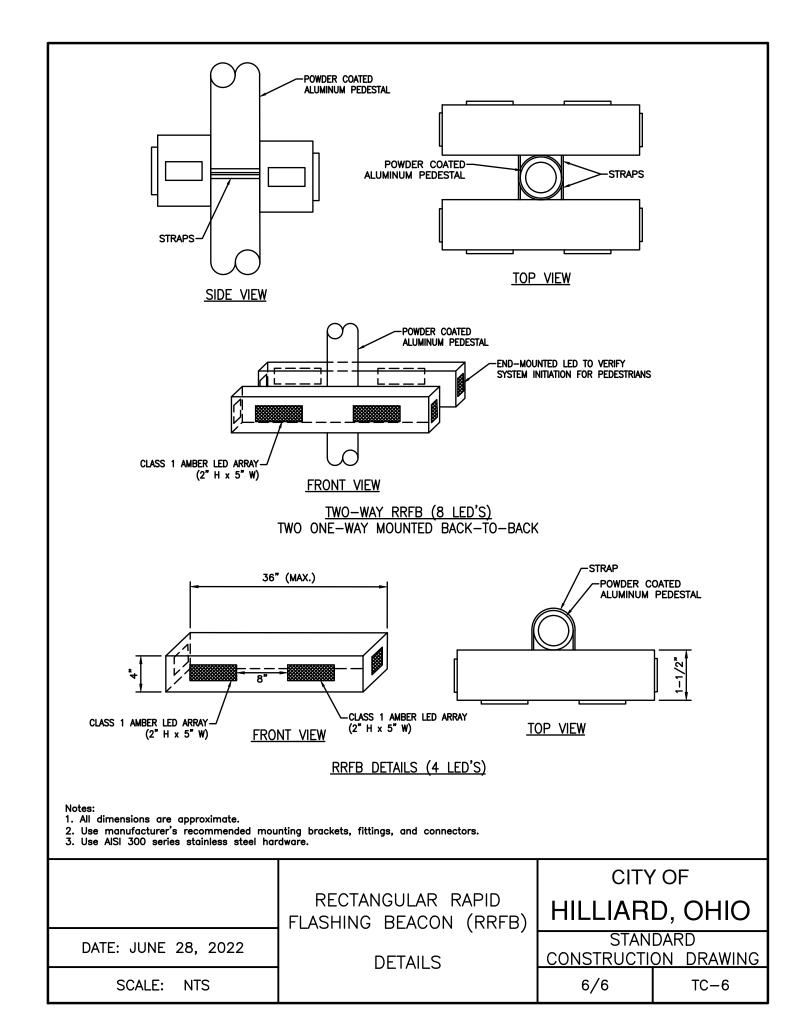
GENERAL NOTES

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HILLIARD, OHIO
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DATE: JUNE 28, 2022

SCALE: NTS



- 1. The contractor shall place trench dams along the trench at the locations indicated on the plans.
- 2. For 6" sanitary sewer services, one (1) trench dam is to be placed between the main sewer and the building at a maximum distance of ten (10) feet from the main sewer.
- 3. Cost for trench dams to be included in the price bid for sewer.

