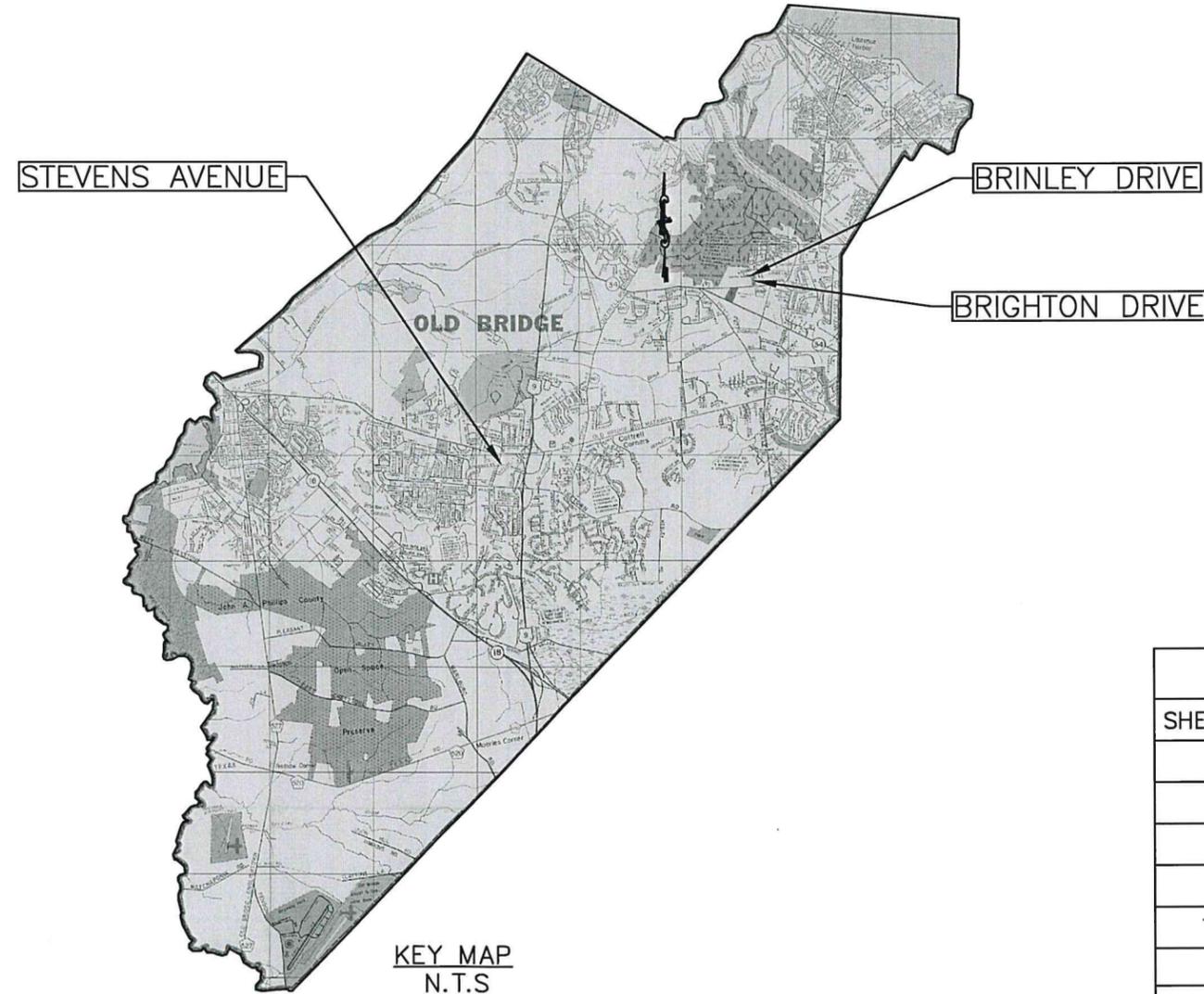


2022 CDBG ROAD RECONSTRUCTION

CONTRACT #2022-71 TOWNSHIP OF OLD BRIDGE MIDDLESEX COUNTY, NJ



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OWEN HENRY

COUNCIL

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DEBBIE WALKER, COUNCIL VICE PRESIDENT
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TOWNSHIP ENGINEER
NICOLE S. SHAPIRO, PE, PP, CME

TOWNSHIP CLERK
KATHRYN HUTCHINSON, RMC

INDEX OF SHEETS	
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2	ESTIMATE AND DISTRIBUTION OF QUANTITIES
3	LEGEND & GENERAL NOTES SHEET
4-6	CONSTRUCTION PLANS
7-10	CONSTRUCTION DETAILS
11	TRAFFIC CONTROL PLAN
12	SOIL EROSION SEDIMENT CONTROL NOTES & DETAILS

THE 2019 STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION OF THE NEW JERSEY DEPARTMENT OF TRANSPORTATION AS AMENDED BY THE SUPPLEMENTARY SPECIFICATIONS TO GOVERN.

FILE NO. / DWG NAME: COVER SHEET
CAD DIR: FILE PATH: R:\01-CAPITAL IMPROVEMENT PROJECTS\2022-CDBG ROAD RECONSTRUCTION\01-Plan

NO.	DATE	DESCRIPTION	BY
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TJ
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11/10/2022

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2022 CDBG ROAD RECONSTRUCTION
CONTRACT #2022-71

COVER SHEET

JOB No:
CONTRACT No:
2022-71
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1 OF 12

2022 CBDG ROAD RECONSTRUCTION ESTIMATE AND DISTRIBUTION OF QUANTITIES

ITEM NO.	DESCRIPTION	UNIT	TOTAL QUANTITY				IF AND WHERE DIRECTED
				Brinley Drive Whole Street (Including Brighton Drive) Sheet 4 of 12 Ward 1	Brinley Drive Whole Street (Including Brighton Drive) Sheet 5 of 12 Ward 1	Stevens Avenue Part - Bushnell Road to Rittner Lane Sheet 6 of 12 Ward 4	
1	MAINTENANCE & PROTECTION OF TRAFFIC	L.S.	1				
2	6" x 8" x 18" CONCRETE VERTICAL CURB	L.F.	60	4		32	24
3	GRANITE BLOCK CURB	L.F.	30	6			24
4	CONCRETE SIDEWALK, 4" THICK	S.Y.	50	15		29	6
5	CONCRETE SIDEWALK, REINFORCED, 6" THICK	S.Y.	5				5
6	DETECTABLE WARNING SURFACE	S.Y.	3	1		2	
7	HMA MILLING, 2" MINIMUM	S.Y.	6,865	3,205	1,800	1,860	
8	TACK COAT	Gallon	343	160	90	93	
9	HOT MIX ASPHALT 9.5M64 SURFACE COURSE, 2" THICK	Ton	930	420	240	240	30
10	HOT MIX ASPHALT 19M64 BASE COURSE	Ton	40				40
11	DENSE GRADED AGGREGATE BASE COURSE	Ton	40				40
12	SEALING OF CRACKS & JOINTS IN HMA PAVEMENT	L.F.	250				250
13	RESET MANHOLE CASTING	Unit	1				1
14	RESET INLET CASTING	Unit	1				1
15	BICYCLE SAFE GRATE	Unit	8	7	1		
16	CURB PIECE	Unit	8	7	1		
17	TRAFFIC STRIPES, THERMOPLASTIC, 6"	L.F.	87			87	
18	TRAFFIC STRIPES, THERMOPLASTIC, 24"	L.F.	187	31	30	126	
19	REGULATORY AND WARNING SIGN	S.F	22	11	11		
20	TREE REMOVAL, OVER 6" TO 12" DIAMETER	Unit	1	1			

FILE NO. / DWG NAME: EQDQ
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2022 CBDG ROAD RECONSTRUCTION
CONTRACT #2022-71
ESTIMATE AND DISTRIBUTION OF QUANTITIES

JOB No:
CONTRACT No:
2022-71
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2 OF 12

FILE NO. / DWG NAME: LEGEND & GENERAL NOTES SHEET
CAD DIR: FILE PATH: R:\01-CAPITAL IMPROVEMENT PROJECTS\2022-CDBG ROAD RECONSTRUCTION\01-Plan

GENERAL CONSTRUCTION NOTES:

1. THE CONTRACTOR SHALL NOTIFY THE OLD BRIDGE TOWNSHIP ENGINEERING AND POLICE DEPARTMENTS 72 HOURS PRIOR TO THE START OF ANY WORK.
2. THE CONTRACTOR SHALL COORDINATE THE CONSTRUCTION SCHEDULE WITH THE TOWNSHIP ENGINEERING DEPARTMENT. SCHEDULING AND REVISED SCHEDULES ARE REQUIRED TO BE SUBMITTED IN WRITTEN FORM.
3. THE PROJECT SHALL BE COMPLETED WITHIN 45 DAYS OF THE NOTICE TO PROCEED.
4. MILLED AREAS SHALL NOT BE LEFT UNPAVED FOR LONGER THAN 48 HOURS, UNLESS APPROVED BY THE ENGINEER. IF MILLED AREAS ARE LEFT UNPAVED FOR MORE THAN 48 HOURS, TEMPORARY ASPHALT RAMPS EXTENDING AT LEAST 2 FEET FROM THE EDGE OF MANHOLE COVERS AND INLET GRATES SHALL BE PROVIDED. NO SEPARATE PAYMENT SHALL BE MADE FOR THE RAMPS; THE COST THEREOF SHALL BE INCLUDED IN THE MILLING ITEM. ALL LOOSE MATERIAL SHALL BE REMOVED, AND THE MILLED AREAS SHALL BE SWEEPED PRIOR TO RESURFACING.
5. CONSTRUCTION ACTIVITIES SHALL ONLY BE ALLOWED BETWEEN THE HOURS OF 7:00 AM AND 6:00 PM AS PER OLD BRIDGE TOWNSHIP NOISE ORDINANCE. CONSTRUCTION IS ONLY PERMITTED MONDAY THROUGH SATURDAY. NO WORK SHALL COMMENCE ON SUNDAY, OR A HOLIDAY RECOGNIZED BY THE TOWNSHIP.
6. THE CONTRACTOR SHALL MAKE PROVISIONS FOR MATERIAL AND EQUIPMENT STORAGE. THE CONTRACTOR SHALL COORDINATE THE STORAGE OF MATERIAL AND EQUIPMENT WITH THE ENGINEER AND POLICE DEPARTMENT. THE CONTRACTOR SHALL NOT PLACE EQUIPMENT, TOOLS, MATERIALS, OR OTHER CONSTRUCTION RELATED ITEMS ON PRIVATE PROPERTY. ALL COSTS FOR MATERIAL AND EQUIPMENT STORAGE SHALL BE INCLUDED IN THE VARIOUS BID ITEMS OF THIS CONTRACT.
7. ALL MAINTENANCE AND PROTECTION OF TRAFFIC SHALL BE IN ACCORDANCE WITH THE M.U.T.C.D. AND MUNICIPAL TRAFFIC ORDINANCES. AT A MINIMUM, THE CONTRACTOR SHALL HAVE ALL ROAD CLOSED SIGNS WITH BARRICADES AND BARRELS AT THE PROJECT LIMITS. SEE PROJECT SPECIFICATIONS FOR ALL OTHER REQUIREMENTS OF MAINTENANCE AND PROTECTION OF TRAFFIC. THE FOLLOWING SHOULD BE NOTED BY THE CONTRACTOR:
 - 7.1. FLAGGERS ARE REQUIRED FOR ALL WORK LOCATED AT ROADWAY INTERSECTIONS. THE FLAGGER SHALL BE EQUIPPED WITH A STOP/SLOW PADDLE. FLAGS ARE NOT PERMITTED.
 - 7.2. ENGINEER MAY HALT CONSTRUCTION AT ANY TIME IF THE CONTRACTOR FAILS TO PROVIDE ADEQUATE AND SAFE TEMPORARY TRAFFIC CONTROL.
8. LOCAL RESIDENT ACCESS AS WELL AS ACCESS FOR SCHOOL BUSES, EMERGENCY VEHICLES, GARBAGE TRUCKS, AND MAIL CARRIERS SHALL BE MAINTAINED BY THE CONTRACTOR DURING CONSTRUCTION.
9. THE CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF THEIR WORK. OLD BRIDGE TOWNSHIP WILL NOT ACCEPT OR MAKE PAYMENT FOR DAMAGED, VANDALIZED, OR POOR QUALITY WORK. ALL WORK MUST BE CONSTRUCTED AND FINISHED TO THE SATISFACTION OF THE ENGINEER.
10. THE CONTRACTOR IS RESPONSIBLE FOR RESTORATION OF ALL AREAS DAMAGED, DISTURBED, OR AFFECTED BY CONSTRUCTION. ALL COSTS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE INCLUDED IN THE VARIOUS BID ITEMS OF THIS CONTRACT. RESTORATION SHALL BE DONE IMMEDIATELY OR AT THE END OF THE PROJECT, AS DIRECTED BY THE ENGINEER. THIS INCLUDES BUT IS NOT LIMITED TO:
 - 10.1. RESETTling, RELOCATING, REPAIRING, OR REPLACING ALL CURB, PAVEMENT, MAILBOXES, LAMP POSTS, DRIVEWAYS, UTILITIES, SPRINKLERS, INVISIBLE DOG FENCES, AND ANY OTHER SURROUNDING AREAS
 - 10.2. RESETTling ALL MAILBOXES TO ENSURE THE FACE OF THE MAILBOX IS SIX INCHES BEHIND THE EDGE OF PAVEMENT.
 - 10.3. TOPSOILING, SEEDING, FERTILIZING, AND MULCHING LAWN AREAS.
 - 10.4. SITE RESTORATION OF ALL OTHER AREAS IN KIND.
 - 10.5. COORDINATING WITH PROPERTY OWNERS AS NECESSARY.
11. ALL MATERIALS AND CONSTRUCTION FOR THE IMPROVEMENTS SHOWN SHALL BE IN ACCORDANCE WITH THE NEW JERSEY DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, 2019", AS AMENDED.

12. THE CONTRACTOR SHALL REVIEW ALL SITES AND EXAMINE ALL PLAN SHEETS AND PROJECT SPECIFICATIONS PRIOR TO BIDDING, TO FAMILIARIZE THEMSELVES COMPLETELY WITH THE ACTUAL WORKING CONDITIONS, AND TO ENSURE A COMPLETE UNDERSTANDING OF ALL FACTORS TO BE CONSIDERED IN ACCOMPLISHING THE WORK AS DESCRIBED IN THE PLANS AND SPECIFICATIONS. THE CONTRACTOR SHALL NOTIFY THE TOWNSHIP AND ENGINEER IMMEDIATELY OF ANY ERRORS OR DISCREPANCIES.
13. THE CONTRACTOR IS RESPONSIBLE FOR ALL SOIL EROSION AND SEDIMENT CONTROL MEASURES ON THIS PROJECT. THE CONTRACTOR SHALL COMPLY WITH FREEHOLD SOIL CONSERVATION DISTRICT STANDARDS. IF NEEDED, ADDITIONAL SOIL EROSION AND SEDIMENT CONTROL ITEMS SHALL BE INSTALLED WHERE DIRECTED BY THE ENGINEER.
14. THE CONTRACTOR SHALL MEET WITH AN OLD BRIDGE TOWNSHIP REPRESENTATIVE FOR A PRE-CONSTRUCTION MEETING AND IN-FIELD MEETING TO MARK-OUT ALL LIMITS OF PAVING (L.O.P.) PRIOR TO THE START OF CONSTRUCTION.
15. NO SEPARATE PAYMENT SHALL BE MADE FOR SAW CUTTING OF PAVEMENT.
16. MIDDLESEX COUNTY ROAD OPENING PERMIT IS REQUIRED TO BE OBTAINED BY THE CONTRACTOR WHILE WORKING WITHIN THE RIGHT OF WAY OF COUNTY ROADS. THE CONTRACTOR WILL SUBMIT AND PAY FOR THE ROAD OPENING PERMIT FEE. THE COST OF OBTAINING THE ROAD OPENING PERMIT SHALL BE INCLUDED IN THE VARIOUS ITEMS OF THE BID.

LEGEND (EXISTING)

- | | | |
|--|---|--|
|  LIGHT POLE |  INLET |  STORM MANHOLE |
|  SANITARY MANHOLE |  HYDRANT |  CULVERT/HEADWALL |
|  UTILITY POLE |  WATER VALVE |  SIGN & POST |

LEGEND (PROPOSED):

- | | |
|---|---|
|  MILLING |  CONCRETE DRIVEWAY, REINFORCED, 6" THICK |
|  BASE REPAIR |  CONCRETE SIDEWALK, REINFORCED, 6" THICK |
|  CONCRETE SIDEWALK, 4" THICK |  HMA DRIVEWAY, 3" THICK |
|  INLET |  TOPSOIL, SEED, FERTILIZE, & STRAW MULCH |
| |  SIGN & BREAKAWAY POST |

SURVEY NOTES:

1. EXISTING ROADS, CURBING, SEWERS, DRIVEWAYS, SIDEWALK, AND OTHER EXISTING SITE FEATURES WERE TAKEN FROM TOWNSHIP AERIAL IMAGES, TOPOGRAPHICAL MAPS, TAX MAPS, AND FIELD INSPECTIONS. NOT ALL EXISTING SITE FEATURES ARE SHOWN. THE CONTRACTOR SHALL FIELD VERIFY LOCATIONS OF ALL SITE FEATURES IN THE EVENT OF A DISCREPANCY AT NO ADDITIONAL COST TO THE TOWNSHIP.

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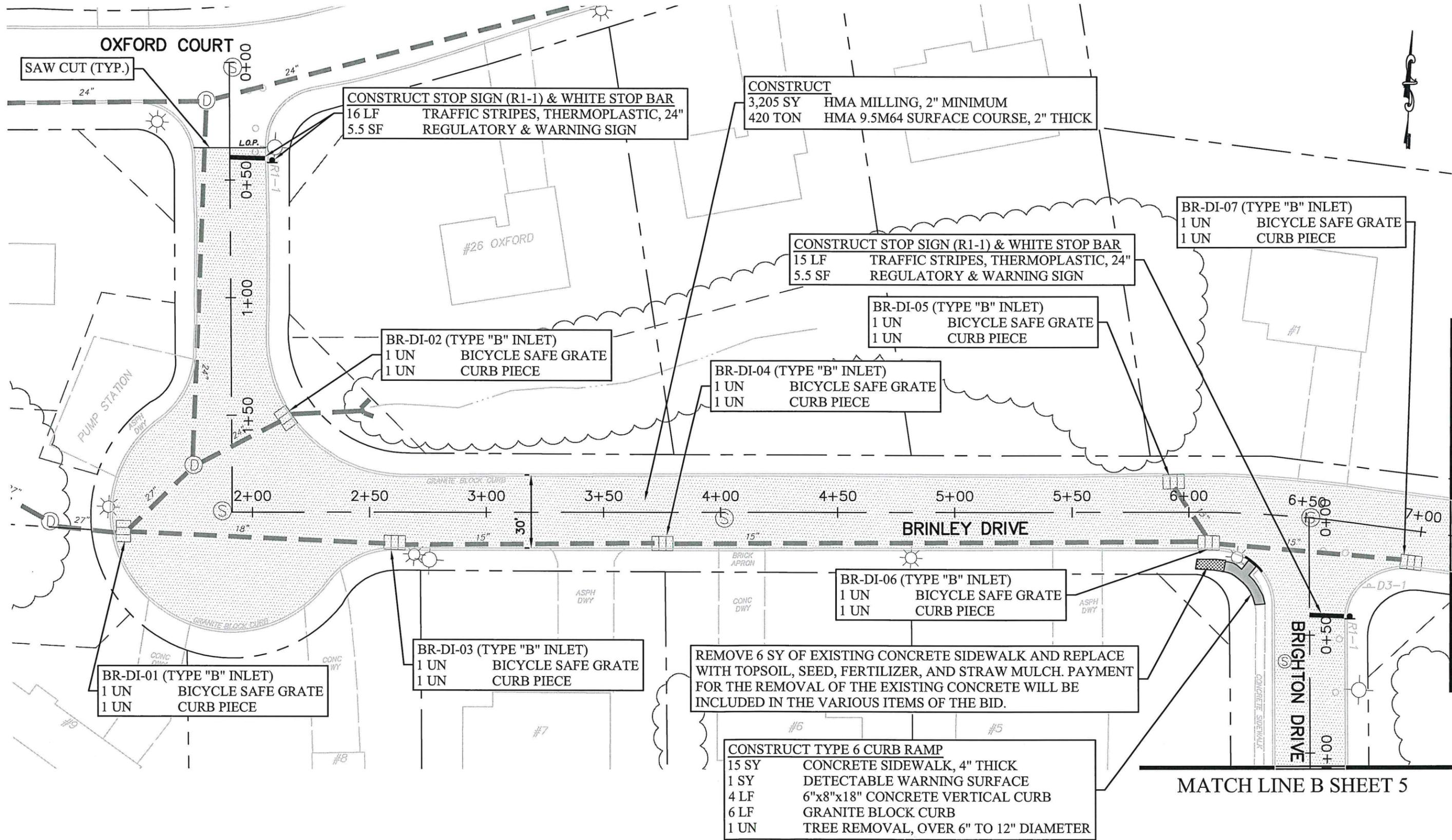
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CONTRACT #2022-71**

LEGEND & GENERAL NOTES SHEET

JOB No:
CONTRACT No:
2022-71
SHEET:
3 OF 12

FILE NO. / DWG NAME: BRINLEY DRIVE & BRIGHTON DRIVE PLAN SHEET
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CONSTRUCT STOP SIGN (R1-1) & WHITE STOP BAR
 16 LF TRAFFIC STRIPES, THERMOPLASTIC, 24"
 5.5 SF REGULATORY & WARNING SIGN

CONSTRUCT
 3,205 SY HMA MILLING, 2" MINIMUM
 420 TON HMA 9.5M64 SURFACE COURSE, 2" THICK

CONSTRUCT STOP SIGN (R1-1) & WHITE STOP BAR
 15 LF TRAFFIC STRIPES, THERMOPLASTIC, 24"
 5.5 SF REGULATORY & WARNING SIGN

BR-DI-07 (TYPE "B" INLET)
 1 UN BICYCLE SAFE GRATE
 1 UN CURB PIECE

BR-DI-02 (TYPE "B" INLET)
 1 UN BICYCLE SAFE GRATE
 1 UN CURB PIECE

BR-DI-05 (TYPE "B" INLET)
 1 UN BICYCLE SAFE GRATE
 1 UN CURB PIECE

BR-DI-04 (TYPE "B" INLET)
 1 UN BICYCLE SAFE GRATE
 1 UN CURB PIECE

BR-DI-01 (TYPE "B" INLET)
 1 UN BICYCLE SAFE GRATE
 1 UN CURB PIECE

BR-DI-03 (TYPE "B" INLET)
 1 UN BICYCLE SAFE GRATE
 1 UN CURB PIECE

BR-DI-06 (TYPE "B" INLET)
 1 UN BICYCLE SAFE GRATE
 1 UN CURB PIECE

REMOVE 6 SY OF EXISTING CONCRETE SIDEWALK AND REPLACE WITH TOPSOIL, SEED, FERTILIZER, AND STRAW MULCH. PAYMENT FOR THE REMOVAL OF THE EXISTING CONCRETE WILL BE INCLUDED IN THE VARIOUS ITEMS OF THE BID.

CONSTRUCT TYPE 6 CURB RAMP
 15 SY CONCRETE SIDEWALK, 4" THICK
 1 SY DETECTABLE WARNING SURFACE
 4 LF 6"x8"x18" CONCRETE VERTICAL CURB
 6 LF GRANITE BLOCK CURB
 1 UN TREE REMOVAL, OVER 6" TO 12" DIAMETER

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DRAWN BY: TJ
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 SCALE: 1"=40'
 DATE: 11/10/2022

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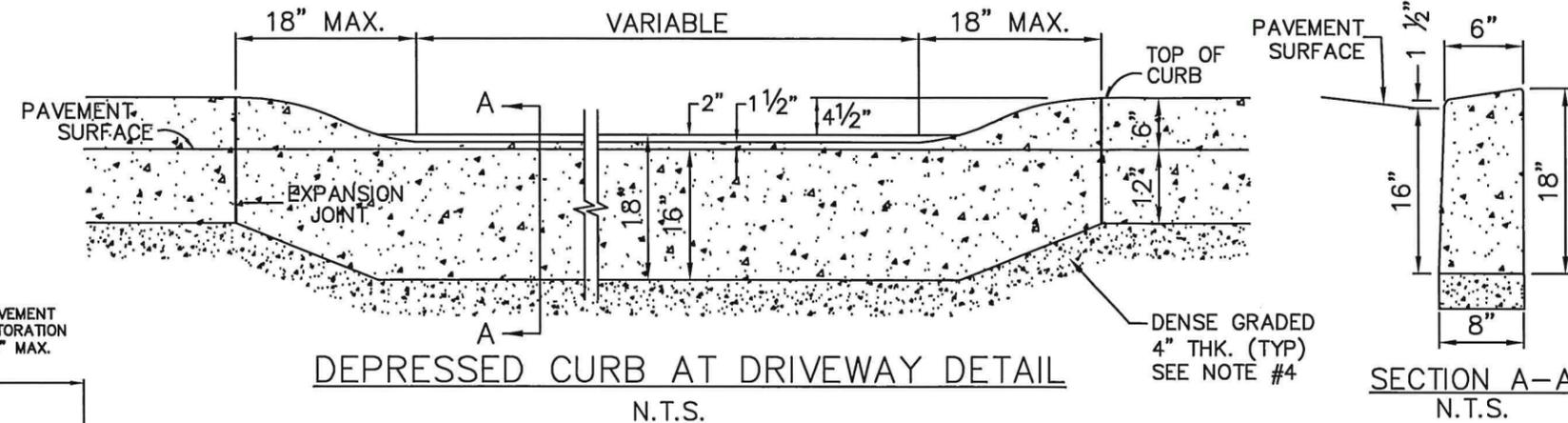
**2022 CDBG ROAD RECONSTRUCTION
 CONTRACT #2022-71
 BRINLEY DRIVE & BRIGHTON DRIVE
 CONSTRUCTION PLAN**

JOB No:
 CONTRACT No: 2022-71
 SHEET: 4 OF 12

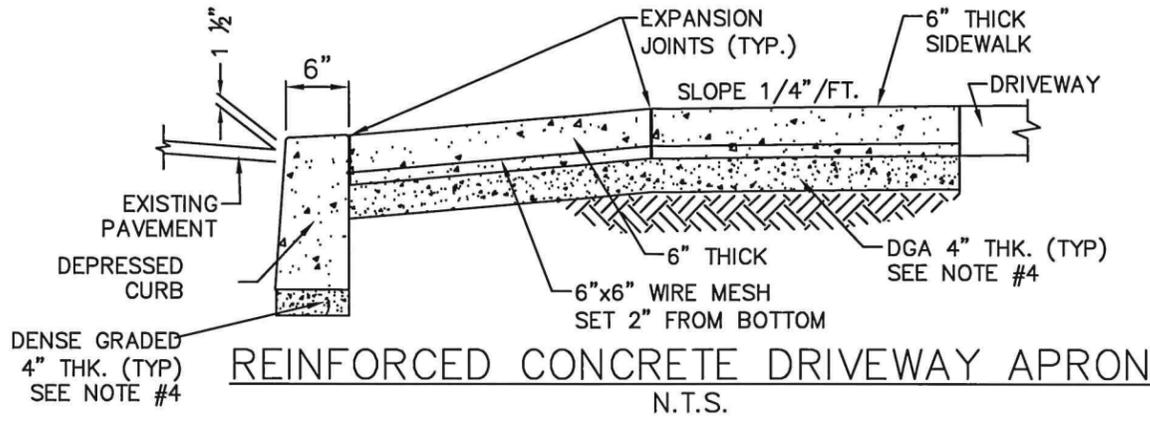
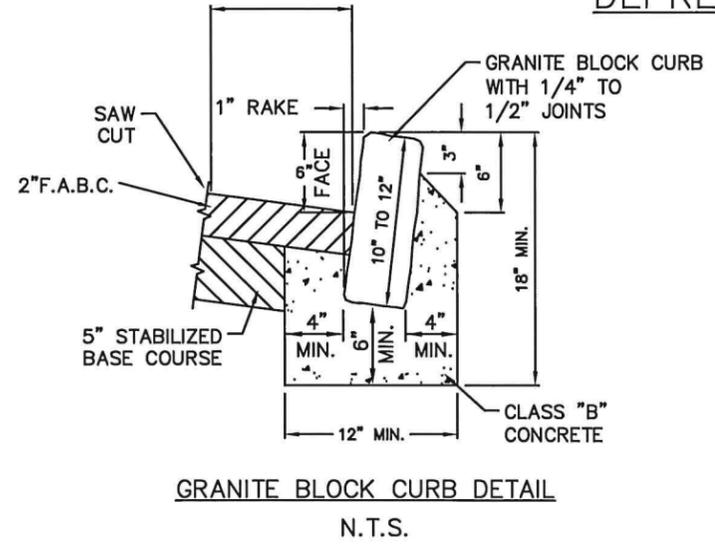
MATCH LINE A SHEET 5

MATCH LINE B SHEET 5

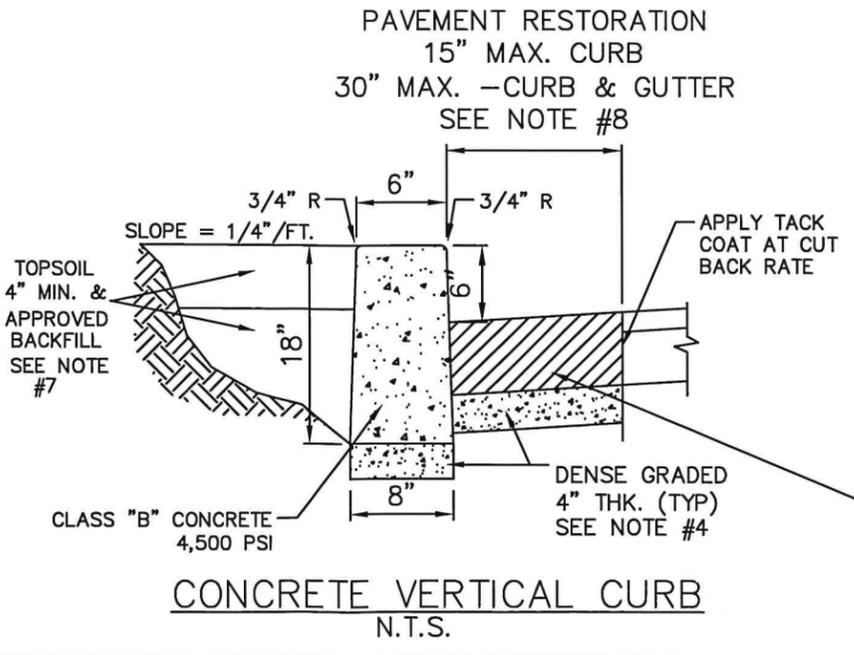
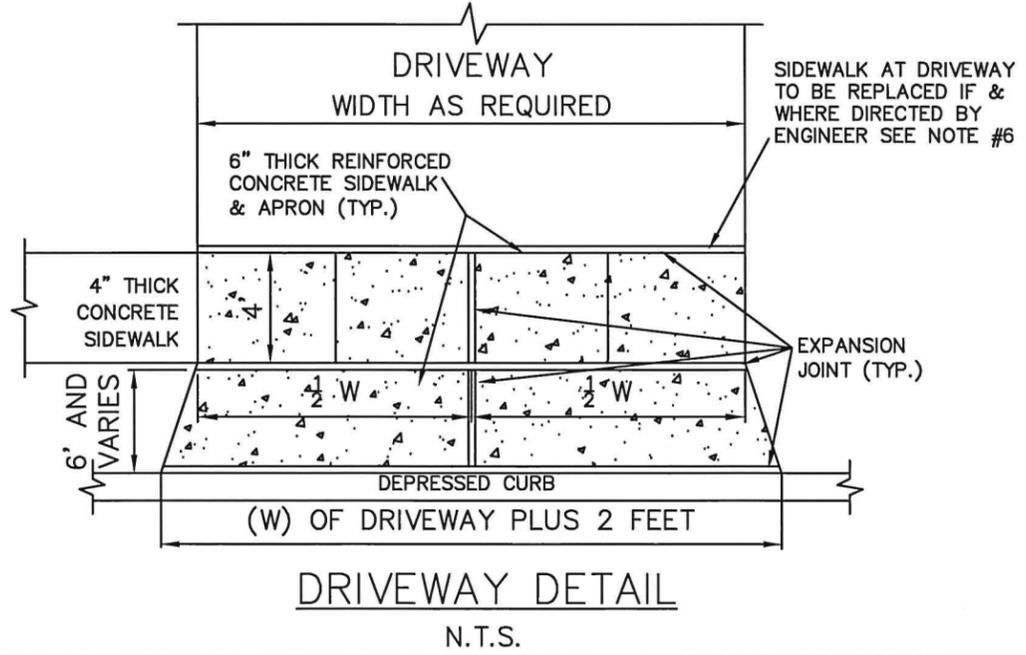
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- NOTES:**
- FACE FORMING OF THE CURB WILL NOT BE PERMITTED.
 - HOT MIX ASPHALT TO BE COMPACTED USING VIBRATOR PLATE OR OTHER MECHANICAL EQUIPMENT APPROVED BY THE ENGINEER. WHEN PLACING 7" THICK HMA BASE COURSE, ASPHALT SHALL BE PLACED AND COMPACTED IN TWO LIFTS.
 - EXPANSION JOINTS 1/2" WIDE WITH PRE FORMED BITUMINOUS JOINT FILLER SHALL BE PROVIDED AT 10' INTERVALS AND ALSO WHERE THE CURB ABUTS SIDEWALKS AND DRIVEWAY APRONS.
 - DENSE GRADED AGGREGATE (DGA) 4" THICK SHALL BE INSTALLED UNDER ALL NEW CONCRETE. NO SEPARATE PAYMENT SHALL BE MADE FOR DENSE GRADED AGGREGATE USED AS BEDDING FOR CURB, SIDEWALKS, APRON, AND DRIVEWAYS. THE COST THEREOF SHALL BE INCLUDED IN THE VARIOUS BID ITEMS.
 - CONCRETE FOR CURB, SIDEWALKS AND DRIVEWAY APRONS SHALL BE CLASS B, 4500 P.S.I.
 - CONCRETE SIDEWALK AND APRON INSTALLED AT DRIVEWAYS SHALL BE 6" THICK AND REINFORCED WITH 6"x 6" WELDED WIRE MESH REINFORCEMENT.
 - GRASS AND TOPSOIL DISTURBED DURING CURB REMOVAL & CONSTRUCTION SHALL BE TAKEN OFF-SITE AND SHALL NOT BE PERMITTED TO BE COMBINED WITH THE APPROVED FILL INSTALLED BEHIND THE NEW CURB OR UNDER AREA OF PAVEMENT RESTORATION. NO SEPARATE PAYMENT WILL BE MADE FOR REMOVAL AND DISPOSAL OF EXISTING GRASS AND TOPSOIL SPOILS AND FOR THE COST OF APPROVED BACKFILL.
 - THERE SHALL BE NO SEPARATE PAYMENT FOR THE RESTORATION OF PAVEMENT. THE COST OF PAVEMENT RESTORATION SHALL BE INCLUDED IN THE VARIOUS BID ITEMS (CURBS, SIDEWALK, SIDEWALK RAMPS, PIPE, UNDERDRAIN, ETC.)
 - THERE SHALL BE NO SEPARATE PAYMENT FOR THE RESTORATION OF LAWN AREAS. THE COST OF LAWN AREA RESTORATION SHALL BE INCLUDED IN THE VARIOUS BID ITEMS (CURBS, SIDEWALK, SIDEWALK RAMPS, ETC.)
 - THERE WILL BE NO SEPARATE PAYMENT FOR THE REMOVAL & REINSTALLATION OF CURB SIDE MAILBOXES. IF THE CONTRACTOR MUST REMOVE ANY EXISTING MAILBOXES TO REMOVE CURB OR CURB WITH GUTTER, THE COST TO REMOVE AND REINSTALL CURB SIDE MAILBOXES MUST BE INCLUDED IN THE BID ITEM FOR CONCRETE CURB AND GRANITE BLOCK CURB.



- NOTES:**
- CONCRETE TO BE N.J.D.O.T. CLASS "B"



HOT MIX ASPHALT (HMA) PAVEMENT RESTORATION, HMA BASE COURSE (19M64 MIX), 5" THICK, HMA SURFACE COURSE (9.5M64 MIX), 2" THICK SEE NOTES #2 & #8.

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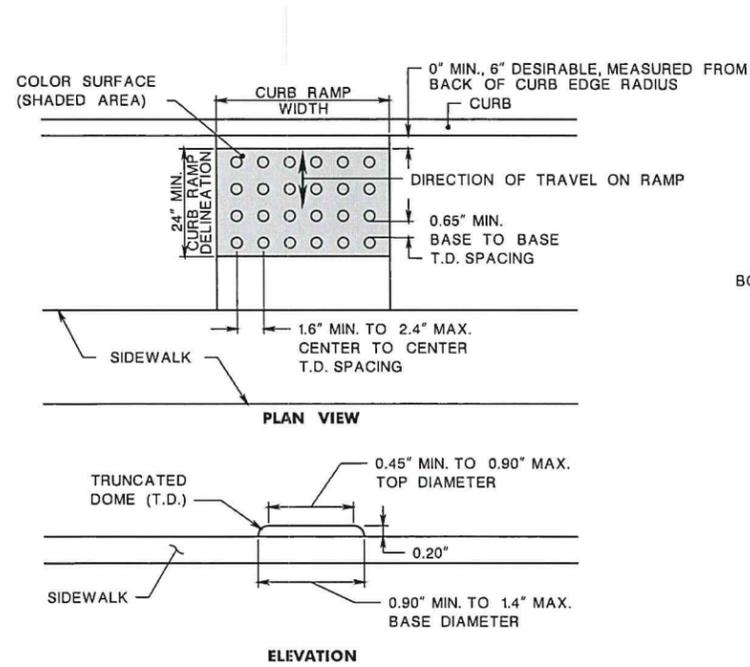
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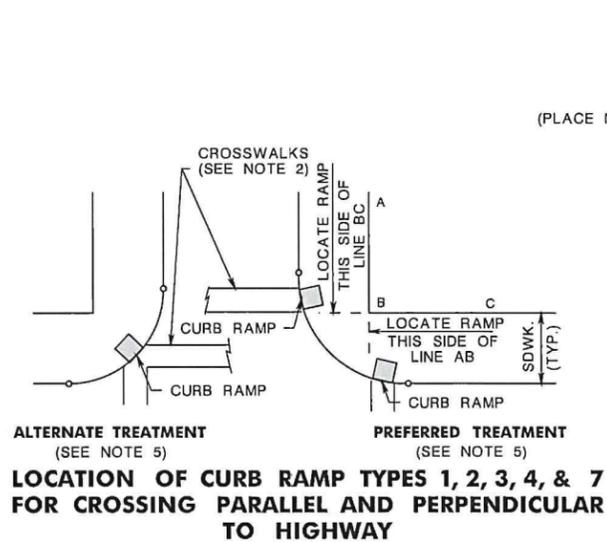
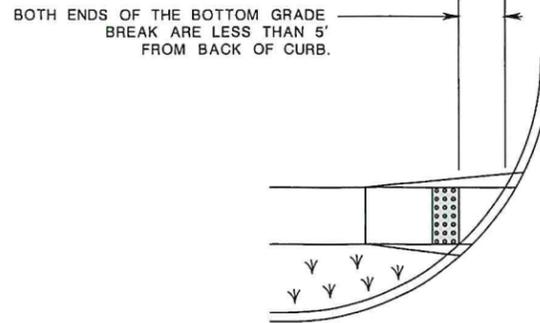
2022 CDBG ROAD RECONSTRUCTION
 CONTRACT #2022-71
 CONSTRUCTION DETAILS 1

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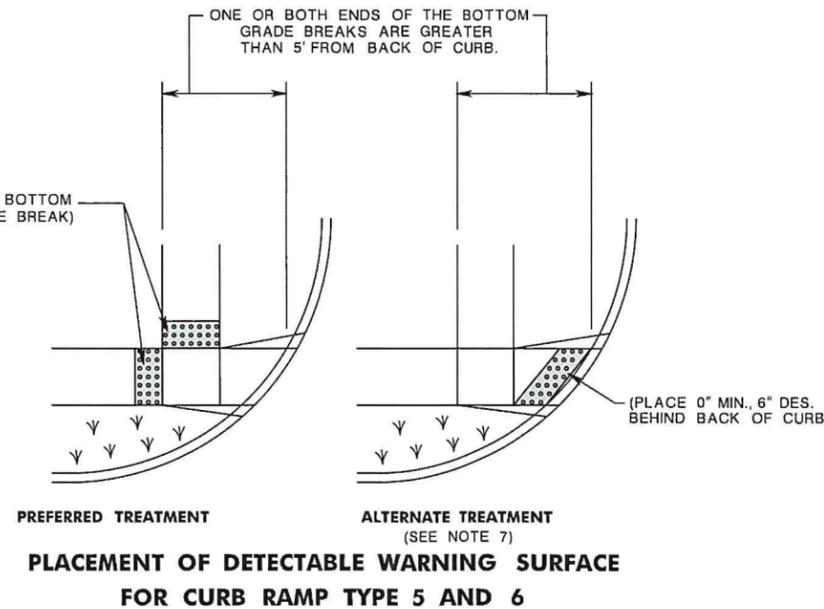
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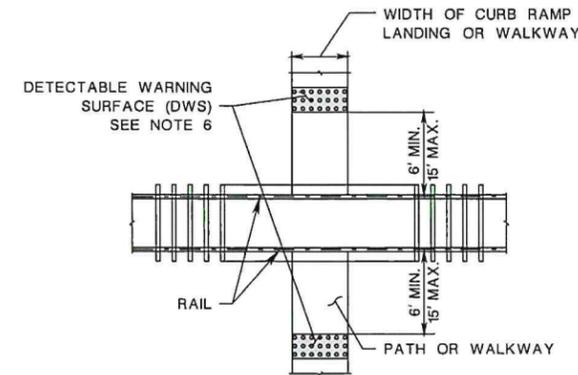
DETECTABLE WARNING SURFACE



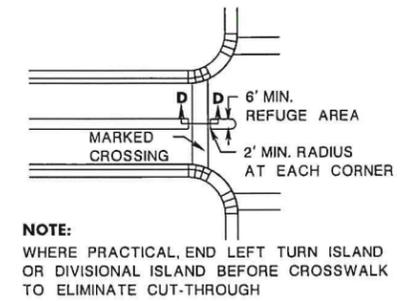
LOCATION OF CURB RAMP TYPES 1, 2, 3, 4, & 7 FOR CROSSING PARALLEL AND PERPENDICULAR TO HIGHWAY



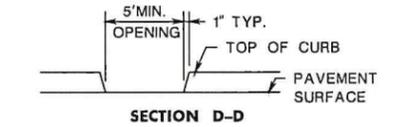
PLACEMENT OF DETECTABLE WARNING SURFACE FOR CURB RAMP TYPE 5 AND 6



PEDESTRIAN RAILROAD CROSSING

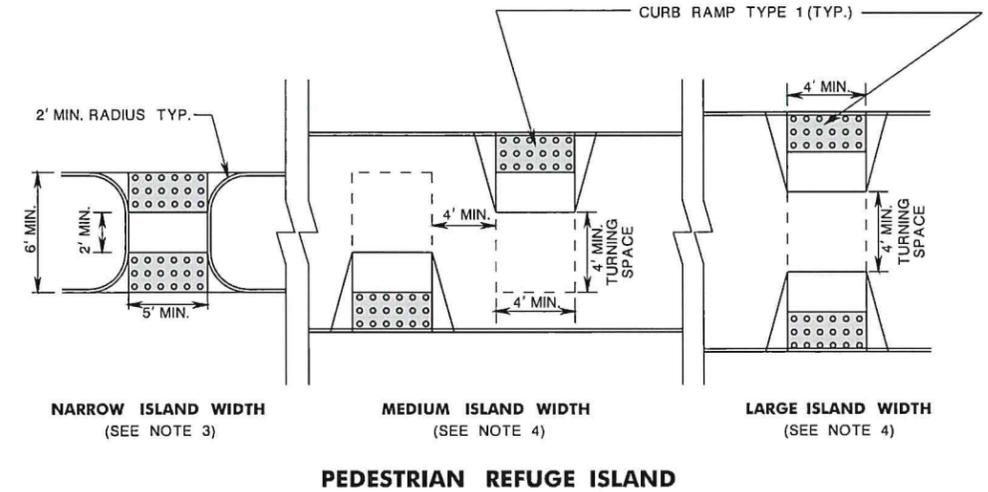


NOTE:
 WHERE PRACTICAL, END LEFT TURN ISLAND OR DIVISIONAL ISLAND BEFORE CROSSWALK TO ELIMINATE CUT-THROUGH



NOTE:
 5' MIN. WIDE OPENING TO BE FLUSH WITH ROADWAY PAVEMENT

PEDESTRIAN REFUGE ISLAND WALKWAY OPENING AT INTERSECTIONS



PEDESTRIAN REFUGE ISLAND

- NOTES:**
- KEEP TURNING SPACE, APPROACH SIDEWALK TRANSITIONS, AND CURB RAMP CLEAR OF OBSTRUCTIONS THAT PROTRUDE ABOVE THE SURFACE.
 - CROSSWALKS AND STOP LINES MAY BE MARKED OR UNMARKED, SEE PLANS.
 - FOR NARROW ISLAND WIDTH, SEE PEDESTRIAN REFUGE ISLAND WALKWAY OPENING AT INTERSECTIONS DETAIL.
 - FOR MEDIUM AND LARGE ISLAND WIDTH, SEE CURB RAMP TYPE 1 ON CD-606-1.
 - CONSTRUCT CURB RAMP TYPES 1, 2, 3, 4, & 7 PERPENDICULAR TO CURBLINE, AS SHOWN.
 - IF A CURB RAMP IS REQUIRED, THE LOCATION OF THE DETECTABLE WARNING SURFACE MUST BE AT THE BOTTOM OF THE RAMP AND WITHIN THE REQUIRED DISTANCE FROM THE RAIL.
 - A STANDARD DETECTABLE WARNING (DWS) SURFACE IS NOT AVAILABLE TO FIT THIS APPLICATION, AND THEREFORE ONE WILL NEED TO BE CUSTOMIZED. THE DWS SHOULD COVER THE ENTIRE WIDTH OF THE RAMP. THE ROWS OF DOMES ON THE DWS SHOULD FOLLOW THE DIRECTION OF TRAVEL OF THE RAMP, SO PEDESTRIANS WHO USE MOBILE DEVICES CAN TRACK BETWEEN THE DOMES.

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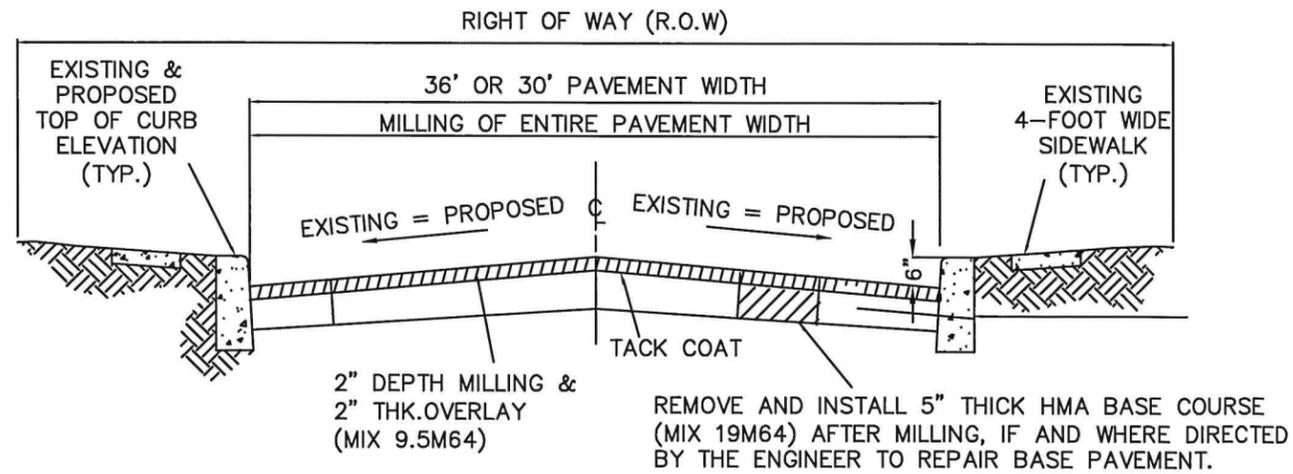
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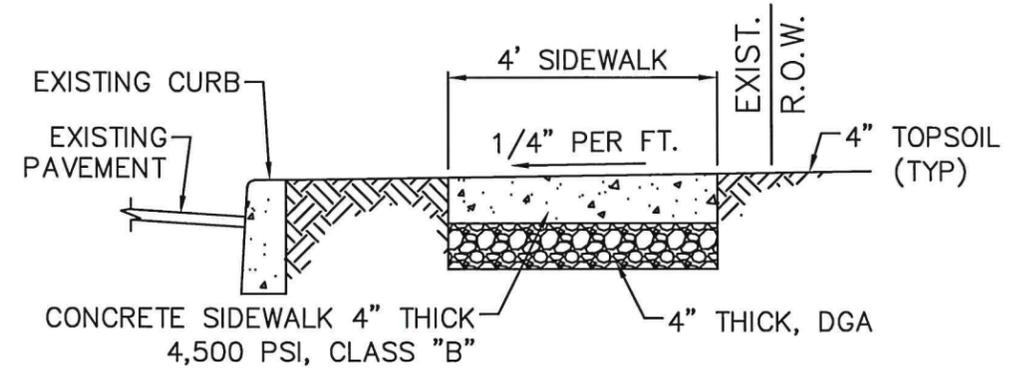
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 CONSTRUCTION DETAILS 3

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NOTE: DGA 6" THK. TO BE INSTALLED UNDER ALL BASE PAVEMENT REPAIRS WHERE DIRECTED BY ENGINEER.

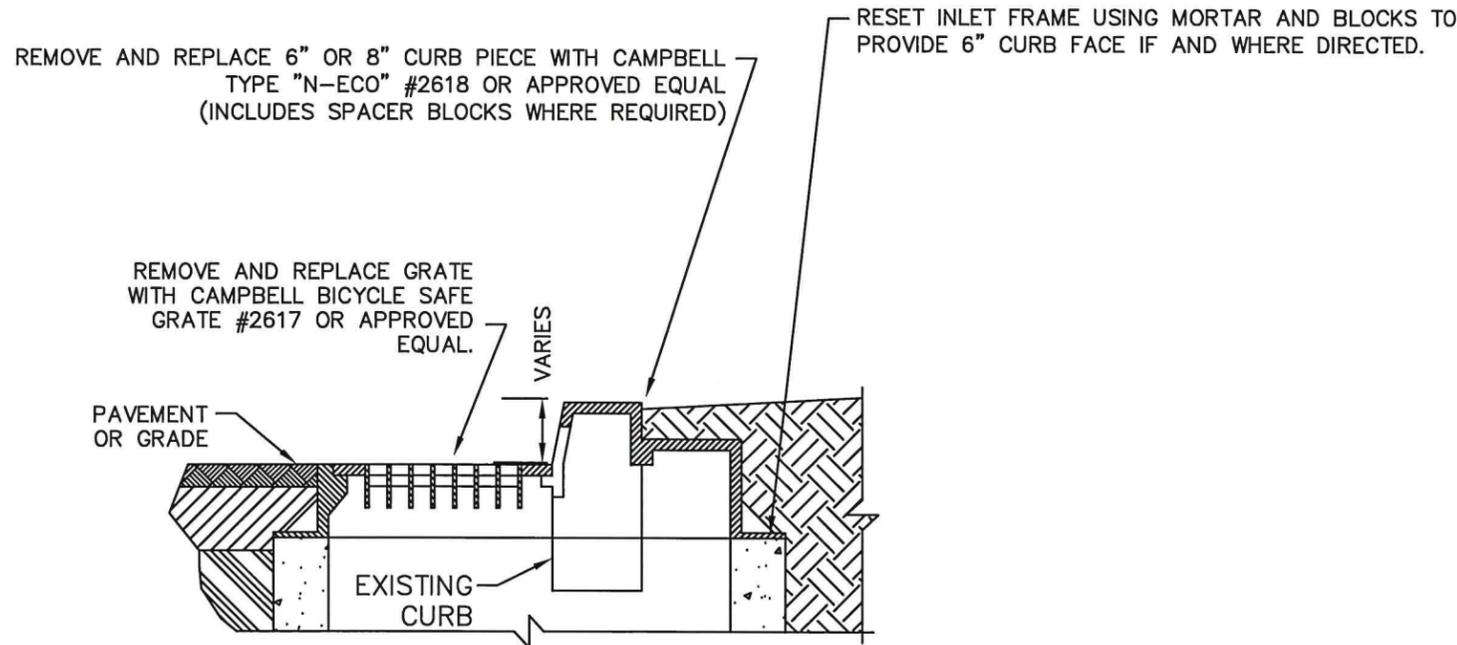
TYPICAL ROAD CROSS SECTION
N.T.S.



NOTE:

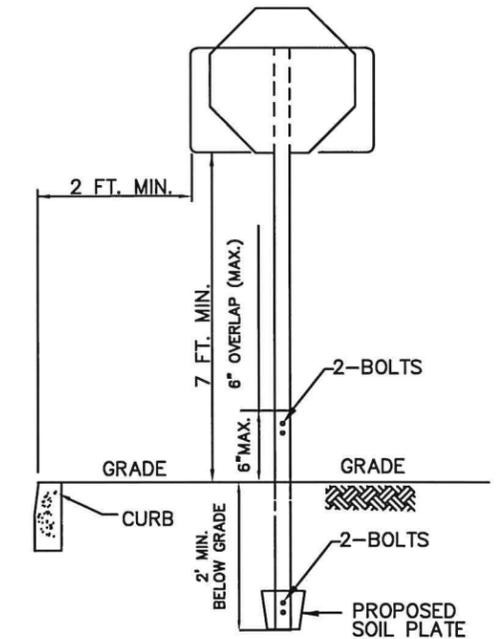
EXPANSION JOINTS FOR SIDEWALK SHALL BE PROVIDED AT TWENTY (20) FEET INTERVALS AND WHERE THE NEW CONCRETE ABUTS EXISTING CONCRETE IT SHALL BE FILLED WITH PRE FORMED BITUMINOUS CELLULAR TYPE JOINT FILLER, 1/2" THICK. OPEN JOINTS AND EXPANSION MATERIAL SHALL BE FULL DEPTH AND WIDTH OF SIDEWALK.

SIDEWALK DETAIL
N.T.S.



STORM SEWER TYPE "B" INLET CURB PIECE AND GRATE RETROFIT DETAIL & RESET INLET FRAME USING MORTAR & BLOCK
N.T.S.

NOTE: 1. CURB PIECE RETROFIT MAY REQUIRE SPACER BLOCKS WHEN REPLACING AN 8" OR LARGER CURB PIECE WITH ECO-STYLE. CURB PIECE REPLACEMENT WILL INCLUDE THE COST OF ANY REQUIRED SPACER BLOCKS.



BREAK AWAY SIGN POST WITH SOIL PLATE 30" X 30" OR SMALLER
N.T.S.

NOTES:

ANY POLE MOUNTED SIGNS THAT ARE REMOVED FROM THE GROUND DURING THE COURSE OF CONSTRUCTION MUST BE RETROFITTED WITH A "BREAK AWAY" DESIGN POLE AND FITTED WITH A SOIL PLATE.

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REVISIONS			

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DESIGN BY: TJ
SCALE: N.T.S.
DATE: 11/10/2022

**TOWNSHIP OF OLD BRIDGE
DEPARTMENT OF ENGINEERING**
One Old Bridge Plaza
Old Bridge, New Jersey 08857
Tel. 732-721-5600 Fax 732-607-7978

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2022 CDBG ROAD RECONSTRUCTION
CONTRACT #2022-71
CONSTRUCTION DETAILS 4

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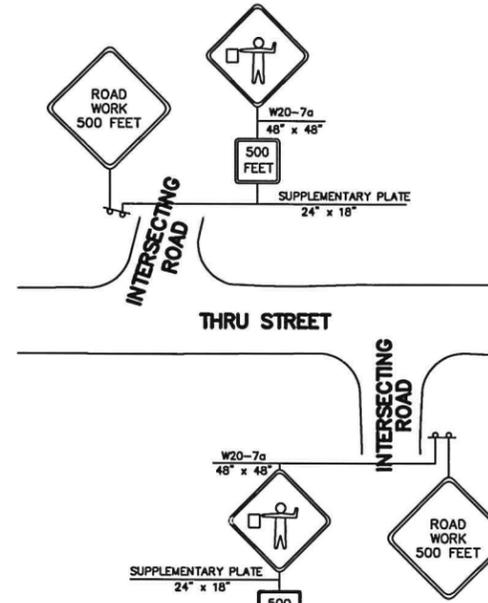
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GENERAL NOTES:

- ALL CONSTRUCTION SIGNS AND TRAFFIC CONTROL DEVICES SHALL BE INSTALLED IN ACCORDANCE WITH "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES," AS AMENDED.
- ADVANCE WARNING SIGNS AND TAPERS SHALL EXTENDED AS SIGHT DISTANCES REQUIRE TO ADJUST FOR REDUCED VISIBILITY DUE TO THE HORIZONTAL AND VERTICAL CURVATURE OF THE ROADWAY.
- CONSTRUCTION SIGNS W8-9A AND W8-14A SHALL BE USED WHEN SUCH PAVEMENT CONDITIONS EXIST. THE PLACEMENT OF THESE SIGNS SHALL BE DONE AS DIRECTED BY THE ENGINEER.
- CONSTRUCTION SIGNS R11-4 SHALL BE PLACED AT THE FIRST INTERSECTING STREET FROM THE CONSTRUCTION SITE AT THE TIME OF CONSTRUCTION ON THE SIDE STREETS.
- 100 FEET BEYOND EACH INTERSECTION OR MAIN ACCESS POINT WITHIN THE AREA OF A LANE OR SHOULDER CLOSURE, THERE SHALL BE W1-6 MOUNTED ON A BREAKAWAY BARRICADE CENTERED ON THE CLOSED WIDTH.
- CONSTRUCTION SIGN W99-2 (GIVE US A BRAKE) SHALL BE LOCATED 200 FEET IN ADVANCE OF PROJECT LIMITS.
- TRAFFIC FINES DOUBLED IN WORK AREA - R(NJ)5-17 SIGN SHALL BE LOCATED 500 FEET AFTER FIRST ADVANCE WARNING SIGN, (W20 SERIES) AT EACH WORK AREA.
- CONSTRUCTION ZONE SPEED LIMIT SHALL BE DETERMINED BY THE REGIONAL TRAFFIC ENGINEER AT THE TIME OF CONSTRUCTION.
- THE SPEED LIMIT R2-1 (BLACK ON WHITE) OR W13-1 (BLACK ON ORANGE) SIGN SHALL BE LOCATED THROUGH WORK AREAS AS DIRECTED BY THE REGIONAL TRAFFIC ENGINEER.
- A REDUCED SPEED AHEAD SIGN, R2-Sa(S) (BLACK ON WHITE) SHALL BE LOCATED IN ADVANCE OF SPEED LIMIT R2-1 OR W13-1 SIGNS WHICH REDUCE THE NORMAL POSTED SPEED LIMIT THROUGH THE CONSTRUCTION ZONE.
- POLICE OR TRAFFIC DIRECTORS SHALL BE USED TO ASSIST IN CONTROLLING TRAFFIC AT INTERSECTIONS.
- CONES MAY BE SUBSTITUTED FOR DRUMS UPON APPROVAL OF THE ENGINEER.
- THE MINIMUM UNOBSTRUCTED LANE WIDTH SHALL BE 11 FEET. LANE WIDTH IS DEFINED AS THE WIDTH FROM THE EDGE OF DEVICE TO CENTER OF LANE LINE.
- ALL CONFLICTING STRIPES SHALL BE REMOVED.
- REMOVABLE PAVEMENT MARKING TAPE OR OTHER MEANS OF TRAFFIC CONTROL SHALL BE UTILIZED WHERE LANE SHIFTS ARE REQUIRED ON INTERMEDIATE OR TOP PAVEMENT LAYERS OR ON EXISTING PAVEMENTS NOT BEING REPAVED.
- UNLESS OTHERWISE SPECIFIED, TRAFFIC PAINT SHALL BE USED WHEN TRAFFIC STRIPES OR TRAFFIC MARKINGS ARE REQUIRED ON INTERMEDIATE PAVEMENT LAYERS THAT NEED TO BE OPENED TO TRAFFIC DUE TO STAGE CONSTRUCTION.
- ALL LANE CLOSURES AND DETOURING SHALL BE COORDINATED WITH THE TOWNSHIP OF OLD BRIDGE POLICE DEPARTMENT. TELEPHONE (732) 721-5600 x3820, SGT. AARON MATIKONIS

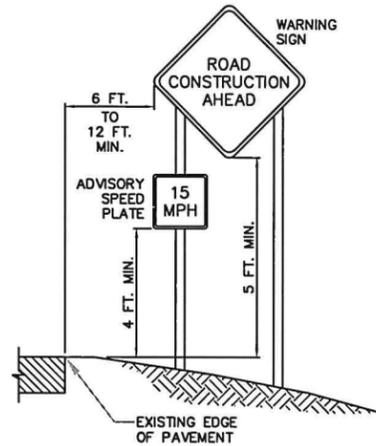
LEGEND:

- BREAKAWAY BARRICADES
- BREAKAWAY BARRICADES WITH SIGN
- CONSTRUCTION SIGNS
- DRUMS
- CONE
- PRECAST CONCRETE CURB CONSTRUCTION BARRIER (TYPE SPECIFIED)
- DIRECTION OF TRAFFIC FLOW
- FLAGGER
- ILLUMINATED FLASHING ARROW MOUNTED ON TOWING VEHICLE SHOWING CAUTION MODE
- ILLUMINATED FLASHING ARROW MOUNTED ON TOWING VEHICLE SHOWING ARROW PATTERN (Left, Right, Both)
- TRAFFIC CONTROL TRUCK WITH MOUNTED CRASH CUSHION AND ARROW BOARD SHOWING CAUTION MODE
- TRAFFIC CONTROL TRUCK WITH MOUNTED CRASH CUSHION AND ARROW BOARD SHOWING ARROW PATTERN (Left, Right, Both)
- TEMPORARY CRASH CUSHION, INERTIAL BARRIER SYSTEM
- TEMPORARY CRASH CUSHION, (all other approved)
- BUFFER ZONE
- WORK AREA
- PAINT STRIPING TRUCK OR OTHER OPERATING VEHICLE

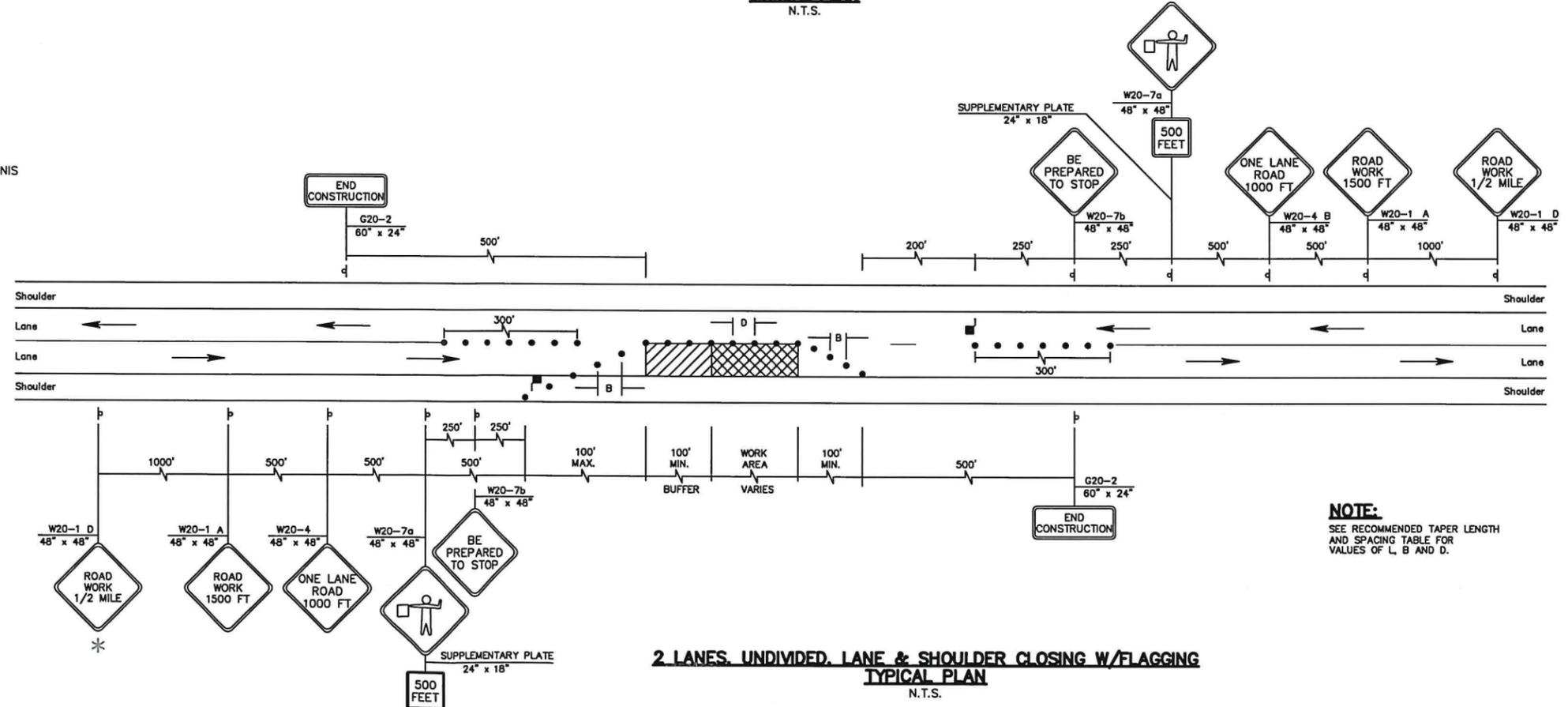


REGULATORY APPROACH SPEED OF TRAFFIC MILES/HOUR	MINIMUM TAPER RATIO IN LENGTH PER FOOT OF WIDTH	RECOMMENDED TAPER LENGTH AND SPACING FOR CHANNELIZING TAPERS			RECOMMENDED SPACING ALONG TANGENTS	
		MINIMUM TAPER LENGTH L - FOR LANE WIDTHS	MAXIMUM DEVICE (B) SPACING ALONG TAPERS IN FEET	MAXIMUM DEVICE (D) SPACING ALONG TANGENTS IN FEET	MAXIMUM DEVICE (D) SPACING ALONG TANGENTS IN FEET	
25	10.5:1	105	115	125	25	50
30	15:1	150	165	180	30	60
35	20.5:1	205	225	245	35	70
40	27:1	270	300	325	40	80
45	45:1	450	495	540	45	90
50	50:1	500	550	600	50	100
55	55:1	550	605	660	55	110
60	60:1	600	660	720	60	120
65	65:1	650	715	780	65	130

NOTE:
THE MAXIMUM DEVICE SPACING ALONG CURVES SHALL BE AS DEFINED FOR TAPERS (B) IN THE ABOVE TABLE.



TYPICAL WARNING SIGN INSTALLATION DETAIL
N.T.S.



NOTE:
SEE RECOMMENDED TAPER LENGTH AND SPACING TABLE FOR VALUES OF L, B AND D.

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TJ
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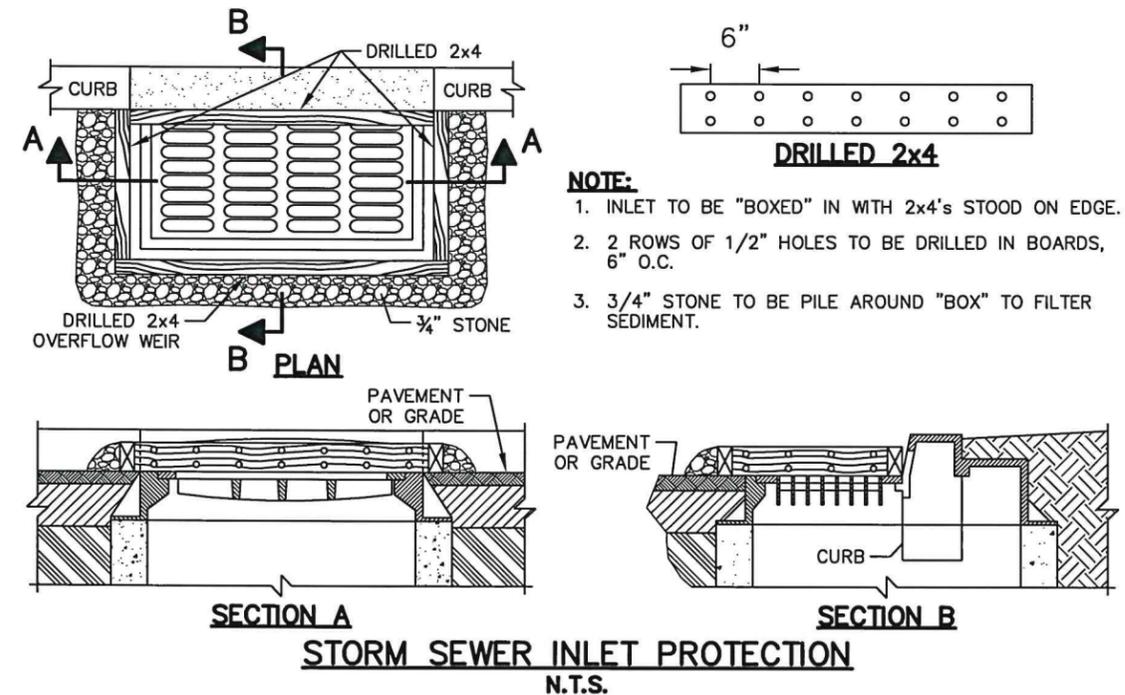
2022 CDBG ROAD RECONSTRUCTION
CONTRACT #2022-71
TRAFFIC CONTROL PLAN

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2022-71
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SOIL EROSION AND SEDIMENT CONTROL NOTES:

1. The Freehold Soil Conservation District shall be notified seventy-two (72) hours in advance of any land disturbing activity.
2. All work is to be done in accordance with the State Standards for Soil Erosion and Sediment Control of New Jersey.
3. All Soil Erosion and Sediment Control practices are to be installed prior to any major soil disturbance, or in their proper sequence, and maintained until permanent protection is established.
4. Any changes to the Certified Soil Erosion and Sediment Control Plans will require the submission of revised Soil Erosion and Sediment Control Plans to the District for re-certification. The revised plans must meet all current State Soil Erosion and Sediment Control Standards.
5. In that N.J.S.A 4:24-39 et. Seq. requires that no Certificates of Occupancy be issued before the provisions of the Certified Plan for Erosion Control have been complied with for permanent measures. All site work and all work around individual lots in subdivisions, will have to be completed prior to the District issuing a Report of Compliance for the issuance of a Certificate of Occupancy by the Municipality.
6. Any disturbed areas that will be left exposed more than thirty (30) days, and not subject to construction traffic, will immediately receive a temporary seeding. If the season prevents the establishment of temporary cover, the disturbed areas will be mulched with straw, or equivalent material, at a rate of 2 to 2 1/2 tons per acre, according to State Standard for Stabilization with Mulch Only.
7. Immediately following initial disturbance or rough grading, all critical areas subject to erosion (i.e. steep slopes and roadway embankments) will receive temporary seeding in combination with straw mulch or a suitable equivalent, at a rate of 1 1/2 to 2 tons per acre, according to State Standards.
8. A sub-base course will be applied immediately following rough grading and installation of improvements to stabilize streets, roads, driveways, and parking areas. In areas where no utilities are present, the sub-base shall be installed within fifteen (15) days of the preliminary grading.
9. Any steep slopes receiving pipeline installation will be backfilled and stabilized daily, as the installation continues (i.e. slopes greater than 3:1).
10. The Standard for Stabilized Construction Access requires the installation of a pad of clean crushed stone at points where traffic will be accessing the construction site. After interior roadways are paved, individual lots require a stabilized construction entrance consisting of one inch to two inch (1" - 2") stone for a minimum length of ten feet (10') equal to the lot entrance width. All other access points shall be blocked off.
11. All soil washed, dropped, spilled, or tracked outside the limit of disturbance or onto public right-of-ways will be removed immediately.
12. Permanent vegetation is to be seeded or sodded on all exposed areas within ten (10) days after final grading.
13. At the time that site preparation for permanent vegetative stabilization is going to be accomplished, any soil that will not provide a suitable environment to support adequate vegetative ground cover shall be removed or treated in such a way that it will permanently adjust the soil conditions and render it suitable for vegetative ground cover. If the removal or treatment of the soil will not provide suitable conditions, non-vegetative means of permanent ground stabilization will have to be employed.
14. In accordance with the Standard for Management of High Acid Producing Soils, any soil having a pH of 4 or less or containing iron sulfides shall be covered with a minimum of twelve (12) inches of soil having a pH of 5 or more prior to seedbed preparation. Areas where trees or shrubs are to be planted shall be covered with a minimum of twenty-four (24) inches of soil having a pH of 5 or more.
15. Conduit Outlet Protection must be installed at all required outfalls prior to the drainage system becoming operational.
16. Unfiltered dewatering is not permitted. Necessary precautions must be taken during all dewatering operations to minimize sediment transfer. Any dewatering methods used must be in accordance with the Standard for Dewatering.
17. Should the control of dust at the site be necessary, the site will be sprinkled until the surface is wet, temporary vegetative cover shall be established or mulch shall be applied as required by the Standard for Dust Control.
18. Stockpile and staging locations established in the field shall be placed within the limit of disturbance according to the certified plan. Staging and stockpiles not located within the limit of disturbance will require certification of a revised Soil Erosion and Sediment Control Plan. Certification of a new Soil Erosion and Sediment Control Plan may be required for these activities if an area greater than 5,000 square feet is disturbed.
19. All soil stockpiles are to be temporarily stabilized in accordance with Soil Erosion and Sediment Control note #6.
20. The property owner shall be responsible for any erosion or sedimentation that may occur below stormwater outfalls or offsite as a result of construction of the project.

Freehold Soil Conservation District
 4000 Kozloski Road
 Freehold, NJ 07728
 (732) 683-8500, fax (732) 683-9140
 Email: info@freeholdscd.org.



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**2022 CDBG ROAD RECONSTRUCTION
 CONTRACT #2022-71
 SOIL EROSION & SEDIMENT CONTROL
 NOTES & DETAILS**

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