CITY OF NEWTON
ENGINEERING DEPARTMENT

PLAN AND PROFILE OF
CENTRE STREET
CONCRETE ROADWAY REPAIR AND ASPHALT OVERLAY

IN THE CITY OF
NEWTON, MASSACHUSETTS

INDEX

SHEET NO. DESCRIPTION
1 TITLE SHEET & INDEX
2 TO 4 CONSTRUCTION PLANS & PROFILES - CENTRE STREET
5 AND 6 GRADE SHEET - CENTRE STREET
7 TO 10 TYPICAL SECTIONS AND DETAILS

SCALE 1" = 50' CENTRE STREET (CURSHING ST TO SOUTH OF PAUL ST)

LENGTH OF PROJECT = 1429 FEET
CONCRETE ROADWAY REPAIR AND ASPHALT OVERLAY

EXISTING CONCRETE ROADWAY JOINT
EXISTING LATERAL CRACK (APPROXIMATE LOCATION)
EXISTING CONCRETE AREAS TO BE SAWCUT, REMOVED & SUBSEQUENTLY RESTORED WITH CONTROLLED DENSITY FILL
EXISTING CONCRETE PANELS TO BE OVERLAYED
EXISTING BITUMINOUS TO BE EXCAVATED
EXISTING BIT. 'SCAB' TO BE REPAIRED
SILT FENCE & HAYBALE EROSION & SEDIMENT CONTROL

LEGEND

HORIZONTAL SCALE IN FEET
VERTICAL SCALE IN FEET

CITY OF NEWTON
CONSTRUCTION PLAN
OF THE
CONCRETE ROADWAY REPAIR AND ASPHALT OVERLAY
AT CENTRE STREET
SCALE AS NOTED 8/21/14

N84 - 38925
Sheet 2 of 10
PLAN VIEW - ALLERTON ROAD AND OLD RODGERS STREET

PROFILE - ALLERTON ROAD AND OLD RODGERS STREET

CENTRE STREET

CONCRETE ROADWAY REPAIR AND ASPHALT OVERLAY

EXISTING CONCRETE ROADWAY JOINT
EXISTING LATERAL CRACK (APPROXIMATE LOCATION)
EXISTING CONCRETE AREAS TO BE SAWCUT, REMOVED & SUBSEQUENTLY RESTORED WITH CONTROLLED DENSITY FILL
EXISTING CONCRETE PANELS TO BE OVERLAYED
EXISTING BIT. ‘SCAB’ TO BE REPAIRED
SILT FENCE & HAYBALE EROSION & SEDIMENT CONTROL

LEGEND

CONTINUED ON PREVIOUS PAGE

CONTINUED ON NEXT PAGE

HOR. SCALE IN FEET
VER. SCALE IN FEET

20
40

40

CITY OF NEWTON
CONSTRUCTION PLAN
OF THE
CONCRETE ROADWAY REPAIR AND ASPHALT OVERLAY
AT CENTRE STREET
SCALE: AS NOTED 8/21/14

Sheer 3 of 10
N84 - 38925
CONCRETE ROADWAY REPAIR AND ASPHALT OVERLAY

EXISTING CONCRETE ROADWAY JOINT
EXISTING LATERAL CRACK (APPROXIMATE LOCATION)
EXISTING CONCRETE AREAS TO BE SAWCUT, REMOVED & SUBSEQUENTLY RESTORED WITH CONTROLLED DENSITY FILL
EXISTING CONCRETE PANELS TO BE OVERLAYED
EXISTING BITUMINOUS TO BE EXCAVATED
EXCAVATED EXISTING BIT. 'SCAB' TO BE REPAIRED
SILT FENCE & HAYBALE EROSION & SEDIMENT CONTROL

LEGEND

PROPOSED ASPHALT TRANSFERN MATCH EXISTING
ONE CONCRETE EXISTING
REPAIR
CONCRETE OVERLAY
PROPOSED ASPHALT OVERLAY
EXISTING CONCRETE PANELS TO BE OVERLAYED

PLAN VIEW - LOCKSEY ROAD TO END OF PROJECT

PROFILE - LOCKSEY ROAD TO END OF PROJECT

HOR. SCALE IN FEET
VER. SCALE IN FEET

SCALE: AS NOTED
8/21/14

CONSTRUCTION PLAN
OF THE
CONCRETE ROADWAY REPAIR AND ASPHALT OVERLAY AT CENTRE STREET

CITY OF NEWTON

Sheet 4 of 10
N84 - 38925
EXISTING CONCRETE ROADWAY JOINT
EXISTING LATERAL CRACK (APPROXIMATE LOCATION)
EXISTING CONCRETE AREAS TO BE SAWCUT, REMOVED & SUBSEQUENTLY RESTORED WITH CONTROLLED DENSITY FILL
EXISTING BITUMINOUS SHOULDERS TO BE EXCAVATED
EXISTING BIT. 'SCAB' TO BE REPAIRED
SILT FENCE & HAYBALE EROSION & SEDIMENT CONTROL

LEGEND
PLAN VIEW - LOCKSLEY ROAD TO END OF PROJECT

CONCRETE ROADWAY REPAIR AND ASPHALT OVERLAY AT CENTRE STREET

SCALE: AS NOTED 8/21/14
THE EXISTING BITUMINOUS SHOULDER IS TO BE EXCAVATED & REPLACED WITH 1 1/2" - 2" OF ASPHALT TOP COURSE OVER 4" OF ASPHALT BINDER COURSE.

LEVELING @ LIMIT OF CONCRETE
1 1/2" FINAL BIT. CONC OVERLAY THIS CRITICAL DEPTH MUST BE MAINTAINED AT THE 'EDGE' OF THE CONCRETE ROADWAY
1 1/2" BIT CONC DEPTH @ CENTERLINE OF ROADWAY OVERLAY THIS CRITICAL DEPTH MUST BE MAINTAINED AT THE 'CENTER' OF THE CONCRETE ROADWAY

SEE PROPOSED PROFILE FOR FINAL FINISHED ROADWAY GRADES

0.5% MINIMUM SLOPE

CENTRE STREET 12+15 TO 14+95
12" GEOTEXTILE PAVING FABRIC (TYP)

EX. CURB TO REMAIN

CENTRE STREET - 14+95 TO 26+85
12" GEOTEXTILE PAVING FABRIC (TYP)

EX. CURB TO REMAIN

CONSTRUCTION NOTES:
1. REINFORCED STEEL IN THE CONCRETE ROADWAY VARIES BETWEEN 4 2/8" AND 5 7/8".

EX. CURB
EX. SEED
AND LOAM
SIDEWALK AND GRASS STRIP WIDTH VARIES

EX. CURB
EX. SEED
AND LOAM
SIDEWALK AND GRASS STRIP WIDTH VARIES

FINISHED CURB
LEVELING COURSE WILL BE REQUIRED ON CENTRE STREET PAVEMENT (EXCEPT FOR LEVELING COURSE)

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FINISHED CURB
LEVELING COURSE WILL BE REQUIRED ON CENTRE STREET PAVEMENT (EXCEPT FOR LEVELING COURSE)
**Basis of Payment**

The basis of payment shall be measured 12" from the intercepting outside joint.

**Notes:*****

1. The saw shall be a self-propelled water-cooled unit & it shall be of a high quality so as to provide clean cuts through the full-depth of the reinforced concrete slab in one pass.

2. The contractor shall be prepared to clean slurry from the project area as it accumulates so that no dust conditions are to be created during the work day or overnight.

3. Sawcutting shall be performed using a 30" diameter 'diamond concrete sawcutting blade.'

4. Water shall be supplied by the city of Newton after the contractor has obtained the proper hydrant adaptor, water meter and backflow preventor from the city of Newton water division. Under this program the contractor will be required to post a security deposit for the required hardware which shall be returned to him once the hardware is returned and its working condition verified.

5. Direct discharge of sawcutting byproduct to the city of Newton drainage system is strictly forbidden and by doing so the contractor shall be liable for all applicable fines and measured damages incurred to remove the slurry.

6. Manhole structures shall be cut in a 5' x 5' pattern. Gate structures shall be cut in a 4' x 4' pattern.

**Traffic Control Device and Sign Details**

- Read under head (use at your own risk)
- Traffic control device and sign details

**Notes:**

1. Mounted signs are to set in full view with the bottom of the sign not less than 7' nor more than 10' from the adjacent ground surface.

2. The RC and D type drum locations shown on this plan depicts the minimum number of respite the perimeter drums that must be deployed at the ready to control traffic for that section of roadway activities underway construction. However, the number, type and location of drums may vary at the engineer's discretion necessary and approved by the engineer and according to the associated project manual.

3. At the beginning of each workday, and/or as otherwise directed throughout the course of the workday, the contractor is to post signs that are clearly visible, marked and delineated so as to establish a clearly visible warning detour route, and it is to further communicate this effort with on-site police details. All detour routes shall take into consideration bus stops, bus and truck traffic, school crossings, businesses, traffic, etc., and are to be established so as to have the least adverse impact on the area.
PURPOSE
SOON AS POSSIBLE ON THE SAME BUSINESS DAY FOLLOWING THE CLEANING AND PLACING OF BAKER ROD OR BLOCKING MEDIA.

PLAN, AND SHALL TERMINATE TO A ZERO DEPTH AT THE LIMIT OF THE EXISTING CONCRETE SLABS.

MAINTAIN UNTIL THE ENGINEER OR HIS DESIGNEE SO DIRECTS.

ITS INSTALLATION AND SHALL BE INSTALLED TO A CONSISTENT DEPTH BELOW THE TOP OF THE SLAB AS SPECIFIED ON THE PLAN.

PERIOD OF TIME IN WHICH THEY WILL BE RAISING THEIR CASTINGS.

SPECIFICATIONS CONTAINED WITHIN THE PROJECT MANUAL AND AS SPECIFIED HEREIN.

THIS DIRECTIVE IS PERTINENT TO ALL SAWCUTS TO BE COMPLETE ON SITE.

REMOVED REASONABLE FOR THE PURPOSE OF ACCURATELY LOCATING ALL CASTINGS UPON THE COMPLETION OF THE LEVELING COURSES.

CENTRE STREET TRAFFIC DELAYS (IN ANY DIRECTION) ARE NOT TO EXCEED FOUR MINUTES IN DURATION.

THE CONTRACTOR SHALL COMPLETE THE LOCATIONS OF ALL CASTINGS BY TAKING ITS OWN MEASUREMENTS TO ACCURATELY LOCATION ALL CASTINGS UPON THE COMPLETION OF THE LEVELING COURSES.

IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CONTACT THE RESPECTIVE UTILITY COMPANIES FOR THE PURPOSE OF COORDINATING THE TIME TO BRING THEIR MACHINERY TO THE SITE.

ONCE CASTINGS HAVE BEEN RAISED TO THE FINAL ELEVATION OF THE ELEVATION. ALL EXPOSED VERTICAL EDGES OF THE CASTINGS SHALL BE THOROUGHLY PAINTED WITH FLUORESCENT ORANGE SPRAY PAINT AT THE END OF EACH WORK DAY SO THAT THEY ARE CLEARLY VISIBLE TO MOTOR VEHICLE OPERATORS THRU THE NIGHT.

SAPPED SECTIONS OF EXISTING CONCRETE ROADWAY:

THE DEVICES THAT REMAIN IN THE ROADWAY DIRECTLY ADJACENT TO THE SLAB BEING REPAIRED AS SO AS TO LEAVE A CONSISTENT BASE ON WHICH TO INSTALL THE LEVELING COURSES.

TRAFFIC & PROJECT ZONE INFORMATION

1. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR ESTABLISHING DAILY DETOUR ROUTES TO THE SATISFACTION OF THE ENGINEER AND NEWTON POLICE DEPARTMENT.

2. FOR THE PURPOSE OF ALLOWING THE CONTRACTOR TO MOVE FORWARD WITH CONSTRUCTION WHILE ALLOWING A MEANS TO CONTROL AND MAINTAIN TRAFFIC PATTERNS, THE PROJECT HAS BEEN BROKEN DOWN TO THREE SEPARATE WORK ZONES, EACH RESPECTIVELY CORRESPONDING TO ONE OF THE THREE SERIES OF CONTRACTS THAT FORM THE OCTAGON TRAVEL LANES OF THE CONCRETE ROADWAY.

3. THE CONTRACTOR IS LIMITED TO WORKING IN ONE ZONE (LANE(S) OF THE EXISTING CONCRETE ROADWAY AT A TIME. THIS MEANS THE ENDING THE CONTRACTOR IS TO MAINTAIN TWO LANE TRAFFIC ON CENTRE ST AT ALL TIMES DURING THE CONSTRUCTION PROCESS.

4. THE CONTRACTOR IS TO COMPLETE ALL WORK, EXCLUSIVE OF FINAL ROADWAY TOP, BEFORE ENTERING INTO THE NEXT DESIGNATED WORK ZONE, UNLESS, OR UNTIL, THE ENGINEER OR HIS DESIGNEE SO DIRECTS.

5. THE CONTRACTOR IS TO OBTAIN WRITTEN PERMISSION FROM THE ENGINEER BEFORE STARTING WORK IN THE NEXT ZONE (NOTICE SHEET X)

6. NO DETOURS WILL BE ALLOWED UNLESS APPROVED AND DIRECTED BY THE ENGINEER, BUT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO BOTH ESTABLISH AND MAINTAIN SUCH DETOUR ROUTES.

7. NO WORKSHOPS TO BE PERFORMED WITHIN THE TRAFFIC LANES DURING THE PEAK TRAFFIC HOURS 3:00 AM TO 3:30 AM & 4:00 PM TO 6:30 PM.

8. CENTRE ST IS NOT TO BE CLOSED TO TRAFFIC AT ANY TIME UNLESS OTHERWISE DIRECTED by the ENGINEER

9. NON-EMERGENCY DETOURS MUST BE APPROVED BY THE CITY OF NEWTON TRAFFIC ENGINEER AT LEAST 24 HOURS IN ADVANCE OF THE EVENT, TO THE END THAT THE CONTRACTORS TO PROVIDE A HARD-HAT MEETING/CONTROL PLAN TO THE TRAFFIC ENGINEERS FOR COMMENTARY AND APPROVAL.

10. IF MINIMAL DETOURING IS ALLOWED, IS REQUIRED BY THE ENGINEER, THEN THE CONTRACTOR IS TO COMPLY WITH THE SIGNING AND BARRELLING DIRECTIVES AS NOTED ON THE PLAN AND DETAILED IN THE PROJECT MANUAL.

11. ALL DETOURS SHALL BE CLOSED OR MANEUVERED AROUND THEIR ENTIRE ROUTE, AND ONLY WITH APPROVED DEVICES AND SIGNS, SUCH THAT A STEADY FLOW OF TRAFFIC IS SAFELY MANUFACTURED AT ALL TIMES.

12. BUS TRAFFIC SHALL NOT BE DISRUPTED (IE: SCHOOL BUSES AND PUBLIC TRANSPORTATION SCHEDULES).

13. TRAFFIC DELAYS (IN ANY DIRECTION) ARE NOT TO EXCEED FOUR MINUTES IN DURATION.

14. TRAFFIC ELIMINATION (IF POSSIBLE) OF EVERY WORKDAY WHEN TRENCHING HAS BEEN PERFORMED WITHIN THE ROADWAY.

15. THE CONTRACTOR IS TO MAINTAIN DRIVEWAY ACCESS THROUGHOUT THE DURATION OF THE PROJECT, THIS WILL BE ACHIEVED BY FLATTENING OR FILLING THE SHOULDER ELEVATION WITH GRAVEL AS A TEMPORARY MEANS OF ACCESS DURING THE ASPHALT SHOULDER EXCAVATION OPERATION.