

# THE CONSTRUCTION PLANS FOR 2004 ROAD IMPROVEMENTS PROGRAM

BOROUGH OF MADISON  
MORRIS COUNTY, NEW JERSEY

SCALE AS INDICATED

MAY, 2004

## BOROUGH COUNCIL

ELLWOOD R. KERKESLAGER, Mayor  
ASTRI J. BAILLIE, Council President  
MARY-ANNA HOLDEN, Council Member  
DONALD J. BOWEN, Council Member  
CARMELA VITALE, Council Member  
SAM MANTONE, Council Member  
JOHN M. ELIAS, Council Member

UTILITY COMPANIES	
GAS - PUBLIC SERVICE ELECTRIC & GAS	(908) 522-7411
SEWER - BOROUGH OF MADISON	(973) 593-3088
ELECTRIC - BOROUGH OF MADISON	(973) 593-3091
WATER - BOROUGH OF MADISON	(973) 593-3092
TELE - VERIZON	(800) 427-9977
CABLE - CABLEVISION	(973) 884-2293
NEW JERSEY ONE-CALL	(800) 272-1000

### NOTE:

LOCATION OF UTILITIES AS SHOWN ON THESE PLANS ARE PLOTTED FROM AVAILABLE DATA ON FILE WITH THE UTILITY COMPANIES AND FIELD OBSERVATIONS BY THE BOROUGH ENGINEERING DEPARTMENT AND ARE NOT GUARANTEED AS TO EXACTNESS. THE CONTRACTOR IS TO CONTACT UTILITY COMPANIES 72 HOURS PRIOR TO CONSTRUCTION TO DETERMINE EXACT LOCATION AND DEPTH OF ALL UTILITIES IN ACCORDANCE WITH THE REQUIREMENTS OF THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL USE THE UTILITY LOCATIONS AS AN AID IN DETERMINING EXACT UTILITY LOCATIONS.

## BOROUGH ADMINISTRATOR

JAMES R. ALLISON

## BOROUGH ENGINEER

ROBERT A. VOGEL, P.E., C.M.E.

## BOROUGH ATTORNEY

JOSEPH MEZZACCA, JR., ESQ.

## WATER DEPARTMENT FOREMAN

SALATORE DeBIASSE

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2001 STANDARD SPECIFICATIONS FOR ROAD & BRIDGE CONSTRUCTION  
CURRENT NJDOT SUPPLEMENTAL SPECIFICATIONS  
AND CURRENT A.W.W.A STANDARDS TO GOVERN

BOROUGH OF MADISON  
DEPARTMENT OF ENGINEERING  
HARTLEY DODGE MEMORIAL  
MADISON, MORRIS COUNTY, N.J. 07940  
(973) 693-3060

DATE \_\_\_\_\_  
ROBERT A. VOGEL, P.E.  
PROFESSIONAL ENGINEER N.J. LIC. NO. 34463



BOROUGH OF  
FLORHAM PARK

- WEST COMMON
- AVERY COURT
- BEDFORD COURT
- DENBY COURT
- GREENWICH COURT
- HEMPSTEAD COURT
- KINSTON COURT
- FAIRFAX COURT
- CAMBRIDGE COURT
- CHELSEA COURT
- NORWICH COURT
- PLYMOUTH COURT
- MAYFIELD COURT

MORRIS  
TOWNSHIP

HARDING  
TOWNSHIP

CHATHAM  
TOWNSHIP

BOROUGH OF  
FLORHAM PARK

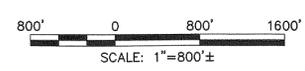
"BID ALTERNATE"

BOROUGH OF  
CHATHAM

CHATHAM  
TOWNSHIP

2004 ROAD IMPROVEMENTS PROGRAM  
LOCATION PLAN

BOROUGH OF MADISON  
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MADISON, MORRIS COUNTY, N.J. 07940  
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NO.	REVISIONS	DATE	BY	CHK.	APPR.

DATE \_\_\_\_\_  
**ROBERT A. VOGEL, P.E.**  
PROFESSIONAL ENGINEER N.J. LIC. NO. 34463

SCALE: 1" = 800'±  
DATE: 5-14-04  
DR. BY: D. BUCK  
DWC. NO. 2 of 13

# 2004 ROADWAY IMPROVEMENTS

## ESTIMATE & DISTRIBUTION OF QUANTITIES

### BID ALTERNATE

ITEM NO.	DESCRIPTION	UNIT	KINGS ROAD APPROX. QUANTITIES	SEAMAN STREET APPROX. QUANTITIES	ROSCOE AVENUE APPROX. QUANTITIES	SUNSET PLACE APPROX. QUANTITIES	ALMA AVENUE APPROX. QUANTITIES	RACHAEL AVENUE APPROX. QUANTITIES	BAKER AVENUE APPROX. QUANTITIES	DOUGLAS AVENUE APPROX. QUANTITIES	TOTAL APPROX. CONTRACT QUANTITIES
1	MAINTENANCE AND PROTECTION OF TRAFFIC	L.S.	100%	100%	100%	100%	100%	100%	100%	100%	100%
2	POLICE TRAFFIC DIRECTORS	MAN HRS.	80	80	40	20	20	20	40	40	340
3	BITUMINOUS CONCRETE SURFACE, MIX 1-5, 2" THICK	TONS	875	200	230	100	180	190	160	275	2,210
4	BITUMINOUS STABILIZED BASE, MIX 1-2, 6" THICK	TONS	12	120	150	70	120	130	178	144	924
5	DENSE GRADED AGGREGATE BASE COURSE,	C.Y.	5	55	100	35	60	65	100	140	560
6	MILLING, 2" THICK	S.Y.	7,620	1,700	500	0	500	0	0	500	10,820
7	ROOF DRAINS, (SDR 35)	L.F.	120	40	100	0	60	20	40	100	480
8	RESET MANHOLE CASTINGS	EACH	15	2	4	1	2	3	0	6	33
9	RESET VALVE	EACH	22	2	4	0	4	3	4	8	47
10	RESET INLET FRAME & GRATE	EACH	17	2	2	0	2	3	0	0	26
11	CONCRETE SIDEWALK, 4" THICK	S.Y.	335	225	0	125	0	0	0	235	1,130
12	CONCRETE DRIVEWAY APRON, 6" THICK	S.Y.	70	50	0	0	0	0	0	45	165
13	DRIVEWAY RESTORATION, MIX 1-5	S.Y.	45	50	135	0	90	70	50	45	485
14	GRANITE BLOCK CURB	L.F.	100	1,050	1,320	600	1,060	1,120	935	1,520	7,705
15	SAW CUTTING, 2" DEPTH	L.F.	325	120	400	100	100	100	500	230	1,875
16	UNCLASSIFIED ROADWAY EXCAVATION	C.Y.	10	10	100	10	15	15	135	10	305
17	REINFORCED CONCRETE PIPE, 15" DIA.	L.F.	0	0	230	0	20	20	300	0	570
18	DRAINAGE INLET TYPE "B"	UNIT	0	1	2	0	0	0	2	0	5
19	TRAFFIC STRIPING STOP BAR	L.F.	125	30	15	30	45	15	45	0	300
20	TRAFFIC STRIPING, 4" SINGLE LINE	L.F.	1,700	200	100	400	100	100	30	100	3,000
21	TRAFFIC STRIPING, 4" DOUBLE LINE	L.F.	300	100	50	100	50	50	200	0	850
22	TREE REMOVAL, OVER 12" TO 24" DIA.	UNIT	2	0	0	0	0	0	2	2	6
23	TREE REMOVAL, OVER 24" TO 36"	UNIT	2	0	0	0	0	0	2	2	6
24	LANDSCAPE RESTORATION	L.S.	100%	100%	100%	100%	100%	100%	100%	100%	100%

BRUNS STREET APPROX. QUANTITIES	UNION HILL AVENUE APPROX. QUANTITIES	TOTAL APPROX. ALTERNATE QUANTITIES
100%	100%	100%
60	60	120
315	235	550
100	130	230
75	65	140
2,725	2,035	4,760
40	65	105
4	1	5
4	6	10
5	0	5
300	260	560
25	15	40
150	40	190
1,300	1,130	2,430
120	140	260
10	10	20
0	0	0
0	0	0
30	45	75
200	400	600
100	150	250
0	2	2
0	2	2
100%	100%	100%

**2004 ROAD IMPROVEMENTS PROGRAM  
ESTIMATE & DISTRIBUTION  
OF QUANTITIES**

BOROUGH OF MADISON  
DEPARTMENT OF ENGINEERING  
HARTLEY DODGE MEMORIAL  
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(973) 598-8080

NO.	REVISIONS	DATE	BY	CHK.	APPR.

SCALE: N.T.S.  
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DWG. NO. 3 of 13

**ROBERT A. VOGEL, P.E.**  
PROFESSIONAL ENGINEER N.J. LIC. NO. 34463

GENERAL NOTES

- 1) THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, 1989 EDITION, AS PUBLISHED BY THE NEW JERSEY STATE HIGHWAY DEPARTMENT, THE PLANS, TECHNICAL SPECIFICATIONS, ADVERTISEMENT, CONTRACTOR'S PROPOSAL AND INCLUDING BUT NOT LIMITED TO THE AMENDMENTS CONTAINED HEREINAFTER SHALL COMPRISE THE CONTRACT.
- 2) THE CONTRACTOR IS TO REFER TO THE SUPPLEMENTAL SPECIFICATION, WHICH INDICATES WHEN THE STANDARD SPECIFICATIONS, AND/OR THE AMENDMENTS THAT FOLLOW SHOULD APPLY.
- 3) THE CONTRACTOR SHALL COMPLY WITH ALL LAWS, ORDINANCES, RULES, ORDERS AND REGULATIONS RELATING TO THE PERFORMANCE OF THE WORK, THE PROTECTION OF ADJACENT PROPERTY AND THE MAINTENANCE OF PASSAGEWAYS.
- 4) NO CONSTRUCTION, MAINTENANCE OR UTILITY WORK ON, UNDER OR ABOVE THE PROJECT ROAD THAT WILL OBSTRUCT, INTERFERE WITH AND/OR DETOUR TRAFFIC ON THE ROAD, SHALL BE PERFORMED BEFORE THE HOUR OF 7:00 OR AFTER 5:00 PM. THE CONTRACTOR'S WORK HOURS SHALL CONFORM TO LOCAL ORDINANCE. THE CONTRACTOR SHALL NOT DEVIATE FROM THE ABOVE WORK HOURS WITHOUT OBTAINING WRITTEN PERMISSION FROM THE CHIEF OF POLICE PRIOR TO THE START OF CONSTRUCTION.
- 5) EACH AND EVERY PROVISION OF LAW AND CLAUSE REQUIRED BY LAW TO BE INSERTED IN THIS CONTRACT SHALL BE READ AND ENFORCED AS THOUGH IT WERE INCLUDED HEREIN, AND IF THROUGH MISTAKE OR OTHERWISE ANY SUCH PROVISION IS NOT INSERTED, OR IS NOT CORRECTLY INSERTED, THEN UPON THE APPLICATION OF EITHER PARTY, THE CONTRACT SHALL FORTHWITH BE PHYSICALLY AMENDED TO MAKE SUCH INSERTION OR CORRECTION.
- 6) THE CONTRACTOR WILL BE FURNISHED WITH FIVE (5) SETS OF PLANS AND SPECIFICATIONS. ONE (1) COPY OF THE PLANS AND SPECIFICATIONS FURNISHED TO THE CONTRACTOR MUST BE KEPT CONSTANTLY ON THE PROJECT SITE. ANYTHING SHOWN ON THE PLANS AND NOT MENTIONED IN THE SPECIFICATIONS, OR MENTIONED IN THE SPECIFICATIONS AND NOT SHOWN ON THE PLANS, AND ALL WORK AND MATERIALS NECESSARY FOR THE COMPLETION OF THE WORK ACCORDING TO THE INTENT AND MEANING OF THE CONTRACT DOCUMENTS, SHALL BE FURNISHED, PERFORMED AND DONE, AS IF THE SAME WERE BOTH MENTIONED IN THE SPECIFICATIONS AND SHOWN ON THE DRAWINGS. ANY CONFLICT OR INCONSISTENCY BETWEEN THE PLANS AND SPECIFICATIONS, OR ANY DISCREPANCY BETWEEN THE FIGURES AND SCALE OF DRAWINGS SHALL BE SUBMITTED BY THE CONTRACTOR TO THE ENGINEER AS TO WHICH SPECIFICATIONS WILL GOVERN WILL BE CONCLUSIVE AND FINAL.
- 7) IN THE EVENT THE MEANING OF ANY PORTION OF THE SPECIFICATIONS OR DRAWINGS OR ANY SUPPLEMENTARY DRAWINGS OR INSTRUCTIONS OF THE ENGINEER IS DOUBTFUL, THE SAME SHALL BE UNDERSTOOD TO CALL FOR THE BEST TYPE OF CONSTRUCTION, BOTH AS TO MATERIALS AND WORKMANSHIP, WHICH REASONABLY CAN BE INTERPRETED.
- 8) IN THE EVENT A SITUATION ARISES IN WHICH MATERIALS NOT SPECIFIED ON THE PLANS OR INDICATED IN THE SUPPLEMENTAL SPECIFICATION ARE TO BE USED FOR EXTRA WORK, THEN THE STANDARD SPECIFICATIONS OR SUPPLEMENTS WHICHEVER GOVERNS, WILL BE USED.
- 9) THE CONTRACTOR'S ATTENTION IS SPECIFICALLY DIRECTED TO GENERAL CONDITIONS, WHICH REQUIRES THAT HE POST A ONE (1) YEAR MAINTENANCE BOND FOR TEN PERCENT (10%) OF THE FINAL CONTRACT AMOUNT.
- 10) THE GENERAL CONDITIONS OF THE CONTRACT INDICATES THAT THE CONTRACTOR MUST NOTIFY THE ENGINEER OF ANY INTENDED OVERTIME WORK. FURTHER THE BOROUGH MUST BE REIMBURSED BY DEDUCTION OF MONTHLY PAYMENTS FOR THE OVERTIME WORK PERFORMED BY THE INSPECTOR AND/OR BOROUGH PERSONNEL.
- 11) ALL TRENCHES UNLESS OTHERWISE INDICATED IN THE SPECIFICATIONS AND/OR AMENDMENTS, SHALL HAVE BACKFILL MATERIAL AS SPECIFIED IN THE STD. SPECS. THE ENGINEER AT HIS DISCRETION MAY PERMIT THE USE OF EXCAVATED OR OTHER SUITABLE MATERIAL TO BE USED AS BACKFILL ON TRENCHES OUTSIDE THE CURB LINES.
- 12) THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DISPOSAL OF ALL EXCESS MATERIALS EXCAVATED OF WHATEVER NATURE AT HIS OWN EXPENSE. THE BOROUGH IS NOT OBLIGATED TO SUPPLY A DISPOSAL SITE. THE CONTRACTOR MUST NOT DEPOSIT THE EXCESS MATERIALS IN THE BOROUGH LIMITS WITHOUT EXPRESS PERMISSION OF THE BOROUGH ENGINEER.
- 13) THE CONTRACTUAL TIME OF COMPLETION FOR THIS PROJECT IS PROVIDED IN THE SPECIFICATIONS.
- 14) THE CONTRACTOR IS NOTIFIED THAT THE SPECIFICATIONS IN SUBSECTION 110, INDICATE THAT HE MUST MAINTAIN TRAFFIC AND ACCESS TO RESIDENCES. HE IS ALSO NOTIFIED TO ASSURE ACCESS FOR GARBAGE COLLECTION AND EMERGENCY VEHICLES.
- 15) PAYMENT FOR PIPES AND CURBS SHALL BE ON THE BASIS OF HORIZONTAL THE LINEAR FOOT. UNIT PRICE PER LINEAR FEET SHALL INCLUDE THE COST FOR CONSTRUCTION LAYOUT, EXCAVATION, BEDDING AND BACKFILLING WITH SPECIFIED MATERIAL.
- 16) THE CONTRACTOR IS RESPONSIBLE TO OBEY ALL THE SAFETY AND HEALTH REGULATIONS. THE OWNER ASSUMES NO RESPONSIBILITY FOR THE SAFETY OF THE WORK PERFORMED.
- 17) THE CONTRACT INCLUDES STATE WAGE RATES.

CONSTRUCTION NOTES

- 18) PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL HAVE ALL UNDERGROUND UTILITIES LOCATED AND PHYSICALLY MARKED OUT WITHIN THE LIMITS OF THE PROJECT (CALL 1-800-272-1000). THE CONTRACTOR SHALL PROVIDE TEST HOLES IN AREAS OF POSSIBLE CONFLICT TO VERIFY THE DEPTH AND LOCATION OF THE UTILITY. PAYMENT SHALL BE MADE FOR THIS ITEM. NO SEPARATE PAYMENT SHALL BE MADE FOR DELAYS THAT MAY BE NECESSARY TO RELOCATE UTILITIES OR THE PROPOSED LOCATION OF DRAINAGE STRUCTURES.
- 19) THE CONTRACTOR SHALL APPLY THE FINAL PAVED SURFACE WITHIN 72 HOURS OF THE MILLING OPERATION.
- 20) THE CONTRACTOR IS RESPONSIBLE THAT UPON THE COMPLETION OF CONSTRUCTION THAT ALL UTILITY SERVICE CONNECTIONS ARE FUNCTIONING PROPERLY.
- 21) THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION WITH THE LOCAL POLICE DEPARTMENT FOR TRAFFIC OPERATIONS AND PARKING PROHIBITIONS DURING CONSTRUCTION.
- 22) ANY DAMAGE TO UTILITIES SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR, AND ALL COSTS FOR REPAIRS SHALL BE BORNE BY THE CONTRACTOR.
- 23) ALL DISTURBED SHRUBS, FENCING, SIGNS, MAILBOXES, DRIVES, ETC. SHALL BE RESTORED TO THEIR ORIGINAL CONDITION, AND TO THE SATISFACTION OF THE OWNER. NO SEPARATE PAYMENT SHALL BE MADE FOR THIS RESTORATION, UNLESS SPECIFIED ELSEWHERE.
- 24) ALL PROPERTY CORNERS OR MONUMENTS REMOVED DURING CONSTRUCTION SHALL BE REPLACED BY A NEW JERSEY LICENSED LAND SURVEYOR, AT NO SEPARATE COST TO THE OWNER.
- 25) ALL EXISTING UTILITY CASTINGS, COVERS AND GRATES TO BE REMOVED ARE THE PROPERTY OF THE BOROUGH OF MADISON AND SHALL BE DELIVERED TO THE PUBLIC WORKS DEPARTMENT. PAYMENT WILL NOT BE MADE FOR NEW CASTINGS, COVERS AND GRATES UNLESS THE OLD ONES ARE RETURNED.
- 26) ALL MILLED MATERIALS ARE TO BE DISPOSED OF IN ACCORDANCE WITH APPROVED NJDOT/NJDEP METHODS AND MEANS, OR TRANSPORTED AT THE DIRECTION OF THE ENGINEER.
- 27) PRIVATE UTILITY COMPANIES MUST BE CONTACTED BY THE CONTRACTOR SO THAT PRIVATELY OWNED CASTINGS MAY BE RESET BY THE UTILITY COMPANY.
- 28) UNSUITABLE SUBBASE MATERIAL WHICH HAS BEEN UNCOVERED DURING CONSTRUCTION SHALL BE REMOVED AND REPLACED AT THE DIRECTION OF THE ENGINEER. ROADWAY EXCAVATION, UNCLASSIFIED SHALL BE PERFORMED TO REMOVE UNSUITABLE SUBBASE MATERIAL. SUBBASE MATERIAL SHALL BE REPLACED WITH DENSE GRADED AGGREGATE BASE COURSE. ROADWAY EXCAVATION, UNCLASSIFIED, AND DENSE GRADED AGGREGATE BASE COURSE WHICH HAVE BEEN INSTALLED ON AN 'IF AND WHERE DIRECTED' BASIS, WILL BE PAID FOR AT THE UNIT PRICE BID FOR THOSE ITEMS.
- 29) THE CONTRACTOR SHALL PROVIDE AND MAINTAIN ACCESS RAMPS AT ALL CURB OPENINGS FOR THE DURATION OF THE PROJECT. THE CONTRACTOR SHALL ALSO PROVIDE AND MAINTAIN RAMPS AROUND ALL EXPOSED CASTINGS, BOTH PUBLIC AND PRIVATE, WHICH HAVE BEEN UNCOVERED OR RESET DURING CONSTRUCTION.
- 30) THE CONTRACTOR SHALL TAKE ALL NECESSARY MEASURES TO MAINTAIN DUST CONTROL AS REQUIRED OR DIRECTED BY THE ENGINEER. ALL VEHICLES SHALL BE CLEAN AND ALL ROADWAYS SHALL BE MAINTAINED AS DIRECTED BY THE ENGINEER.
- 31) ALL PAVEMENT MARKINGS AND SIGNS SHALL CONFORM TO THE STANDARDS OF THE CURRENT 'MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES'.
- 32) IF NOT OTHERWISE INDICATED, NEW PAVEMENT MARKINGS SHOULD CONFORM TO THE FOLLOWING:  
 CENTER LINES                    2 - 4inch WIDE YELLOW LINES, 4inch APART  
 STOP LINES                      12inch WIDE WHITE LINES (4 ft. MIN. FROM CROSSWALK)  
 CROSSWALKS                    6inch WIDE WHITE LINES, 6ft. MIN. WIDTH  
 MATCH PROPOSED STRIPING WITH EXISTING LANE AND CENTER LINES.
- 33) CONTRACTOR SHALL NOTIFY ENGINEER WHEN TRAFFIC STRIPES AND TRAFFIC PAINT HAVE BEEN LAID OUT PRIOR TO PAINTING. THE ENGINEER WILL INSPECT AND APPROVE LAYOUT PRIOR TO CONTRACTOR PAINTING TRAFFIC STRIPES AND TRAFFIC MARKINGS.
- 34) NO SEPARATE PAYMENT WILL BE MADE FOR THE REMOVAL OF EXISTING CURBS, OSIDEWALKS, ETC., THE COST FOR THE REMOVAL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR SIMILAR NEW ITEMS IN THE PROPOSAL.
- 35) ALL INLET GRATES ARE TO BE BICYCLE SAFE TYPE. ALL INLET GRATES WHICH ARE NOT THE BICYCLE SAFE TYPE SHALL BE REMOVED AND REPLACED WITH A BICYCLE SAFE GRATE. REMOVED GRATES SHALL BECOME THE PROPERTY OF THE BOROUGH.

GENERAL NOTES

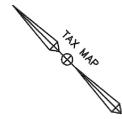
1. MAILBOX 'CONSTRUCTION NOTICE' ONE WEEK PRIOR.
2. MARKOUT STORM, SANITARY, UTILITIES AND SERVICE LOCATIONS. REQUEST TREE MARKOUT.
3. KNOCK ON DOORS PRIOR TO REMOVING RESIDENTIAL ACCESS.
4. PERFORM TREE REMOVAL AND STUMP GRINDING WITHIN PROJECT OR PHASE LIMITS.
5. COMMENCE CURB EXCAVATION ONE SIDE OF STREET ONLY
6. CONSTRUCTION VEHICLES, MATERIALS AND EQUIPMENT ONE SIDE OF STREET ONLY.
7. CALL ENGINEER FOR GRADE, ALIGNMENT AND POSITIVE DRAINAGE CHECK.
8. MAINTAIN TRAFFIC CONES DELINEATING CONSTRUCTION AREAS AT A MINIMUM EVERY 50 FEET OF PROJECT, ONE SIDE, AT ALL TIMES.
9. REPLACE OR REQUEST REPLACEMENT OF OLD OR COMPROMISED UTILITY SERVICE RISERS.
10. POUR CONCRETE CURB AND SIDEWALK ONE SIDE OF STREET ONLY.
11. POUR CONCRETE APRONS / SIDEWALK WITH WWM ONE SIDE OF STREET ONLY
12. RESTORE INDIVIDUAL DRIVEWAY ACCESS NO MORE THAN ONE WEEK AFTER DISTURBANCE.
13. MORTAR ALL GRANITE BLOCK CURB JOINTS.
14. PLACE STABILIZED ASPHALT BASE IN DISTURBED GUTTERS.
15. RESET ALL CONNECTING DRIVEWAY BLOCKS AND SIDEWALK CONNECTIONS.
16. TOPSOIL, SEED AND HAYBALE DISTURBED AREAS BEFORE ADVANCING TO NEXT SIDE OR PHASE.
17. COMMENCE CURB OR SIDEWALK WORK ON OPPOSITE SIDE OF ROAD, NOTICE AS NECESSARY.
18. MAILBOX 'PAVING NOTICE' 3 DAYS PRIOR TO MILLING OPERATIONS, PAINT MILLING LIMITS.
19. REMARK, CHECK CONDITION AND PROTECT UTILITY SERVICE RISERS, MANHOLES AND INLETS.
20. MILLING OPERATIONS COMPLETED, VACUUM SWEEP SURFACE, RECHECK SERVICE RISERS.
21. MANHOLES AND INLETS TO BE RAISED OR RESET AS NEEDED MATCHING TOP OF CURB OR CROSS GRADE.
22. VACUUM SWEEP ENTIRE MILLED AREA TO ELIMINATE REMAINING ROADWAY GRIT ON PAVING DAY.
23. IMPLEMENT COMPLETE TACK AND CONTROL ASPHALT TRUCK DEPARTURE ROUTES ON PAVING DAY.
24. PAVING TO COMMENCE WITHIN 72 HOURS OF MILLING OPERATIONS.
25. STRIPING AND TRAFFIC CONTROLS TO IMMEDIATELY FOLLOW PAVEMENT COMPACTION OPERATIONS.
26. RESEED GRASSED AREAS WITHIN PROJECT LIMITS.

ROAD IMPROVEMENTS PROGRAM  
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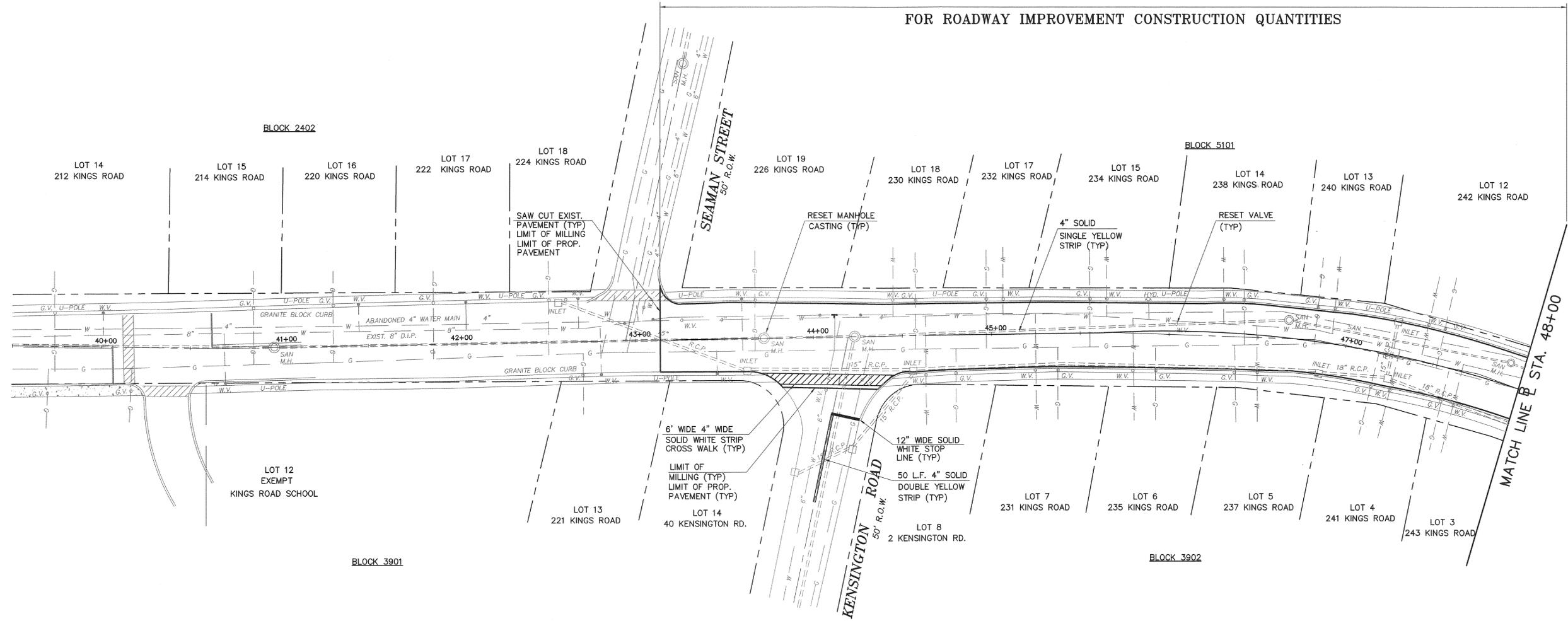
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SEE "ESTIMATE & DISTRIBUTION OF QUANTITIES" DRAWING 3 of 13  
 FOR ROADWAY IMPROVEMENT CONSTRUCTION QUANTITIES

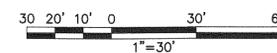


**GENERAL NOTES**

1. R.O.W. LINES, PROPERTY LINES AND LOT INFORMATION SHOWN ON THIS PLAN ARE BASED UPON BOROUGH OF MADISON TAX MAPS.
2. ROADWAY UTILITIES AND ROADWAY UTILITIES ARE BASED UPON FIELD OBSERVATIONS PERFORMED BY THE BOROUGH OF MADISON ENGINEERING DEPARTMENT AND ARE APPROXIMATE IN LOCATION.
3. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION.
4. ALL PAVEMENT REMOVAL SHALL BE SAW CUT.

**2004 ROAD IMPROVEMENTS PROGRAM  
 KINGS ROAD**

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 MADISON, MORRIS COUNTY, N.J. 07940  
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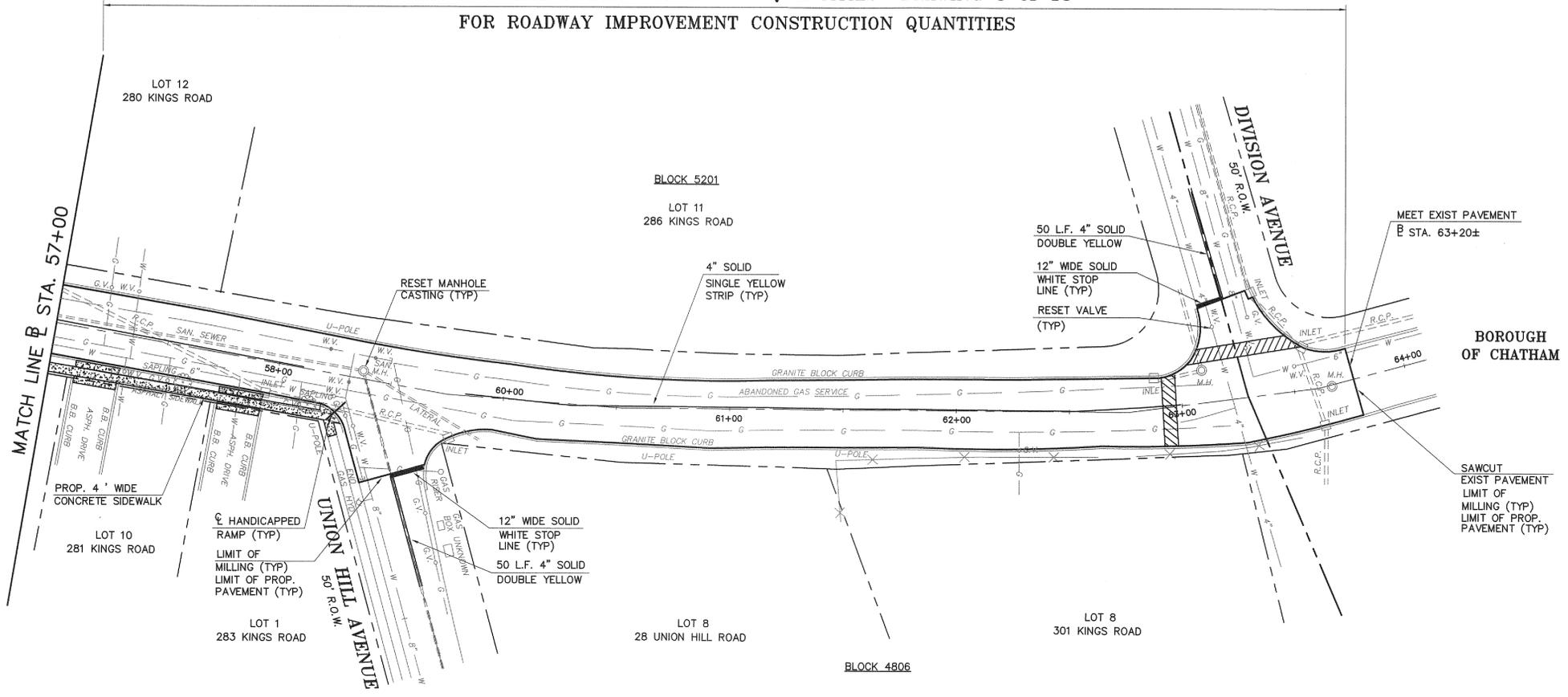
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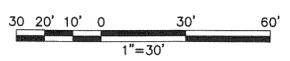


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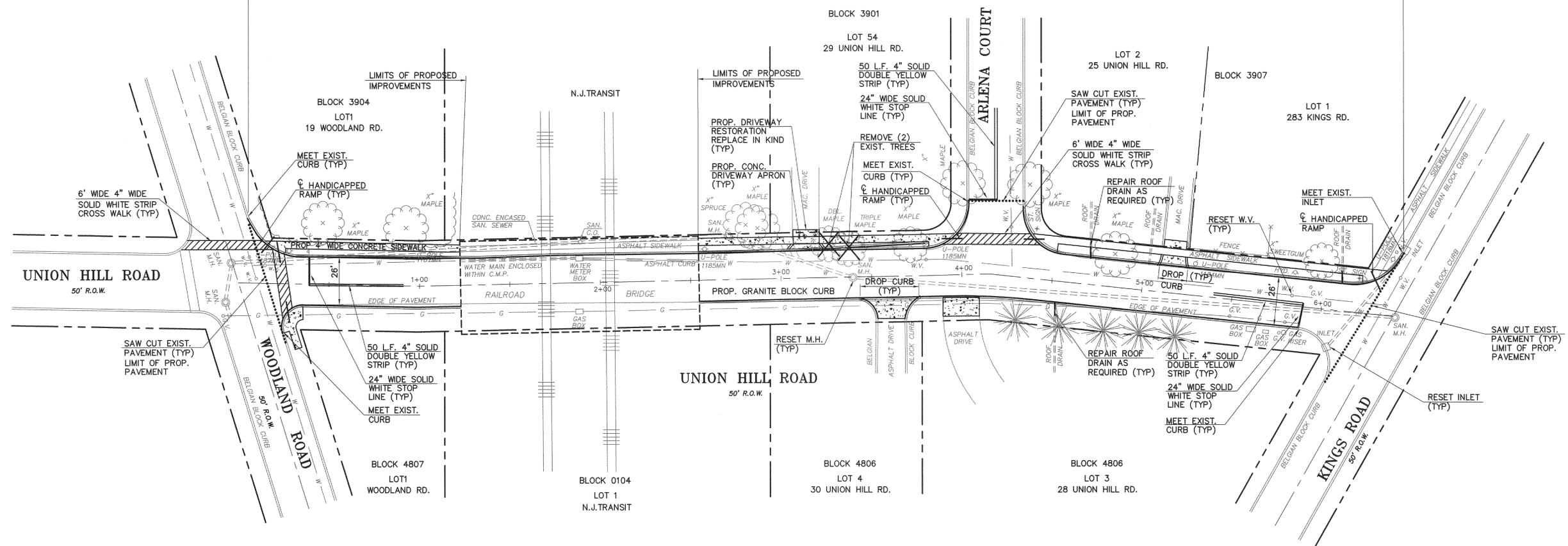
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<b>2004 ROAD IMPROVEMENTS PROGRAM KINGS ROAD</b>	
BOROUGH OF MADISON DEPARTMENT OF ENGINEERING HARTLEY DODGE MEMORIAL MADISON, MORRIS COUNTY, N.J. 07940 (973) 593-3060	
DATE _____ <b>ROBERT A. VOGEL, P.E.</b> PROFESSIONAL ENGINEER N.J. LIC. NO. 34463	SCALE: 1" = 30' DATE: 5-14-04 DR. BY: D. BUCK DWG. NO. 7 of 13



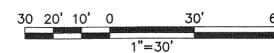


SEE "ESTIMATE & DISTRIBUTION OF QUANTITIES" DRAWING 3 of 13  
FOR ROADWAY IMPROVEMENT CONSTRUCTION QUANTITIES



GENERAL NOTES

1. R.O.W. LINES, PROPERTY LINES AND LOT INFORMATION SHOWN ON THIS PLAN ARE BASED UPON BOROUGH OF MADISON TAX MAPS.
2. ROADWAY UTILITIES AND ROADWAY UTILITIES ARE BASED UPON FIELD OBSERVATIONS PERFORMED BY THE BOROUGH OF MADISON ENGINEERING DEPARTMENT AND ARE APPROXIMATE IN LOCATION.
3. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION.
4. ALL PAVEMENT REMOVAL SHALL BE SAW CUT.



NO.	REVISIONS	DATE	BY	CHK.	APPR.

2004 ROAD IMPROVEMENTS PROGRAM  
UNION HILL ROAD

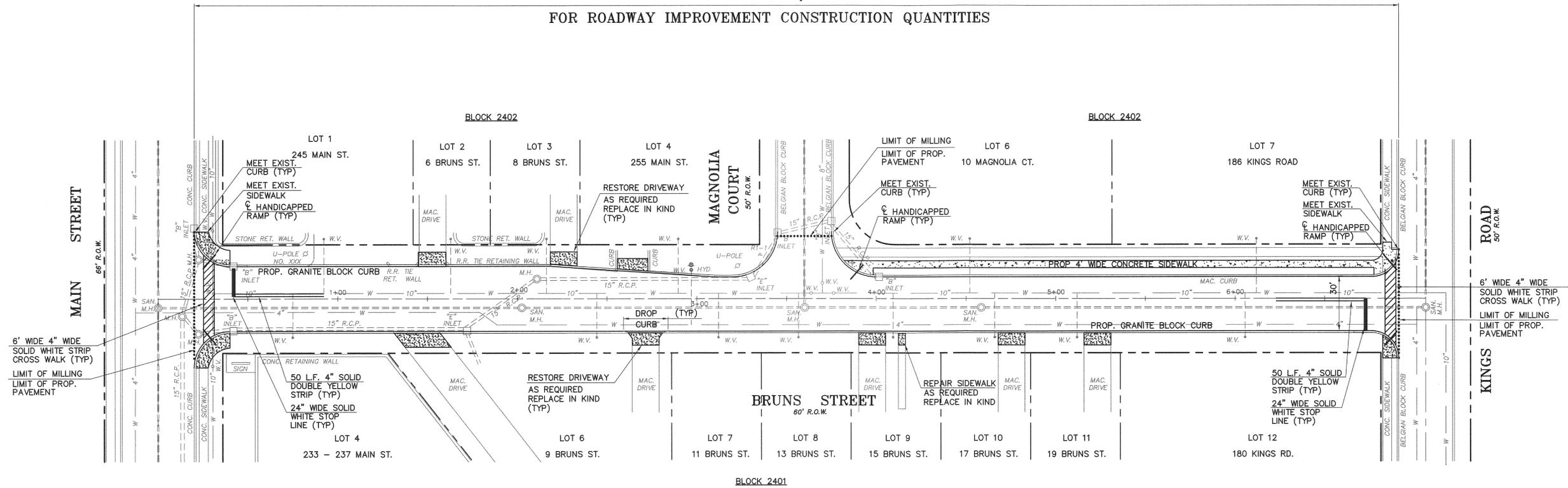
BOROUGH OF MADISON  
DEPARTMENT OF ENGINEERING  
HARTLEY DODGE MEMORIAL  
MADISON, MORRIS COUNTY, N.J. 07940  
(973) 593-9080

DATE \_\_\_\_\_  
**ROBERT A. VOGEL, P.E.**  
PROFESSIONAL ENGINEER N.J. LIC. NO. 34463

SCALE: 1" = 30'  
DATE: 5-14-04  
DR. BY: D. BUCK  
DWG. NO. 11 of 13

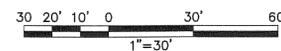


SEE "ESTIMATE & DISTRIBUTION OF QUANTITIES" DRAWING 3 of 13  
FOR ROADWAY IMPROVEMENT CONSTRUCTION QUANTITIES



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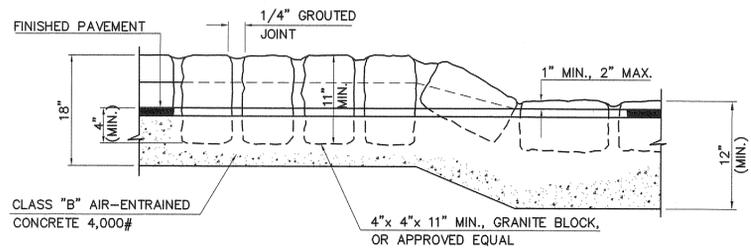
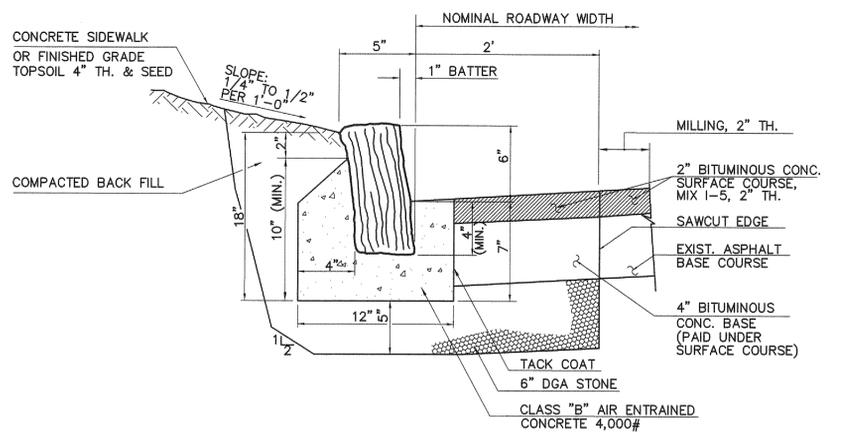
REVISIONS	DATE	BY	CHK.	APPR

2004 ROAD IMPROVEMENTS PROGRAM  
BRUNS STREET

BOROUGH OF MADISON  
DEPARTMENT OF ENGINEERING  
HARTLEY DODGE MEMORIAL  
MADISON, MORRIS COUNTY, N.J. 07940  
(973) 693-8080

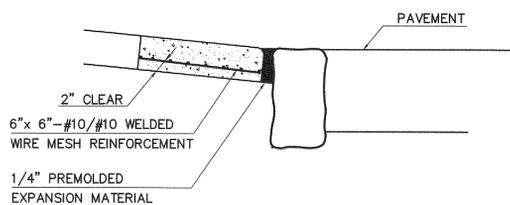
DATE: \_\_\_\_\_  
**ROBERT A. VOGEL, P.E.**  
PROFESSIONAL ENGINEER N.J. LIC. NO. 34463

SCALE: 1" = 30'  
DATE: 5-14-04  
DR. BY: D. BUCK  
DWG. NO. 12 of 13

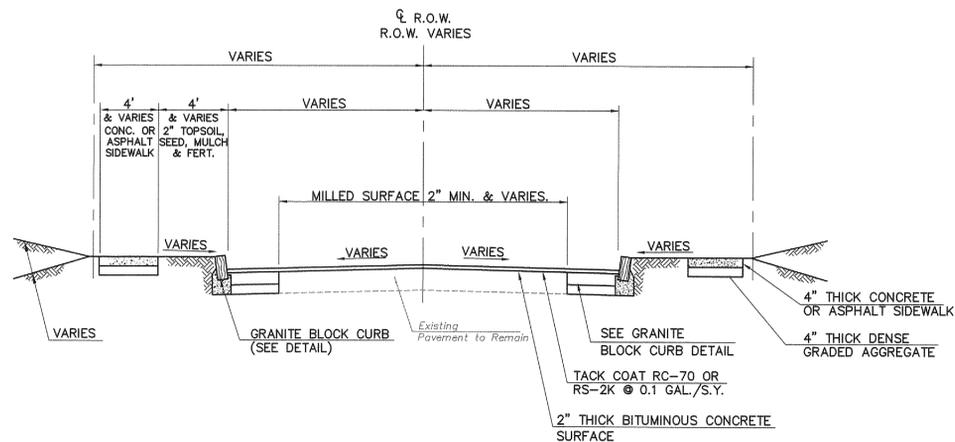


- NOTES:**
- CONSTRUCTION AT DRIVEWAY APRONS SIMILAR TO DETAILS ABOVE.
  - JOINTS TO BE CLEANED AND DAMP PRIOR TO POINTING.

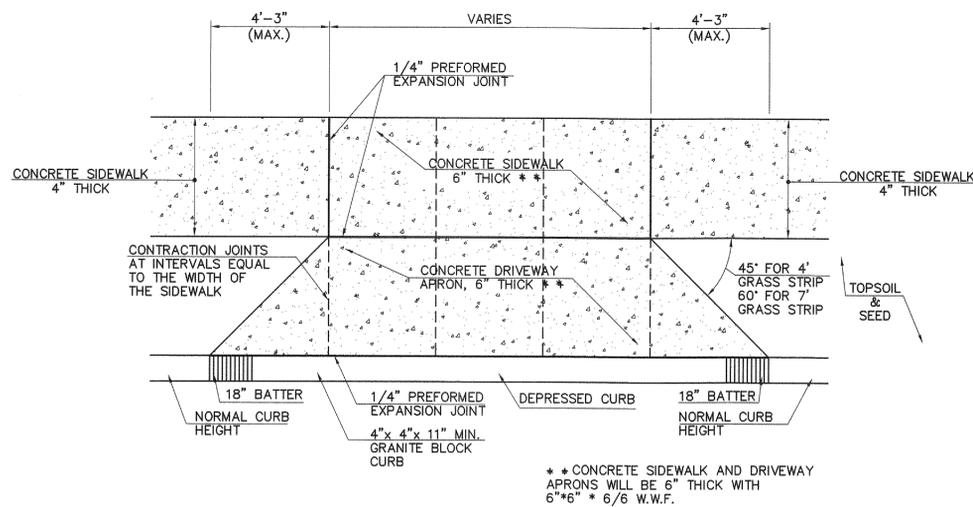
**GRANITE BLOCK CURB**  
ITEM NO. 6E21J  
N.T.S.



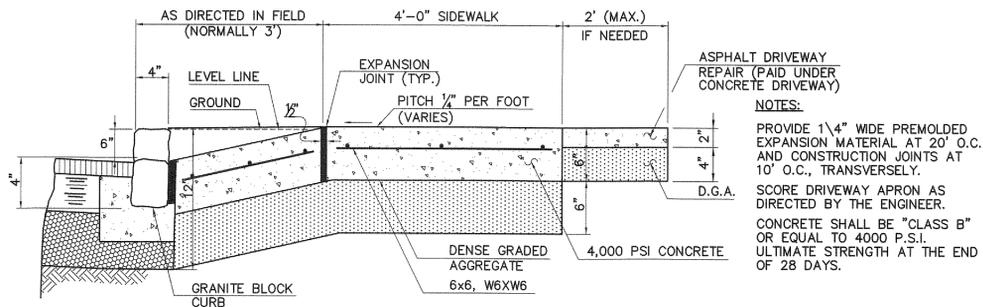
**HANDICAPPED ACCESS RAMP**  
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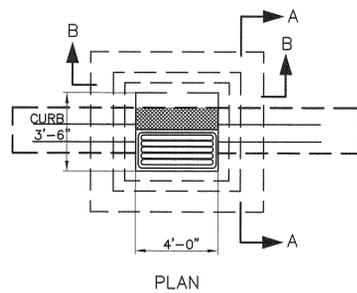
**TYPICAL CROSS SECTION**  
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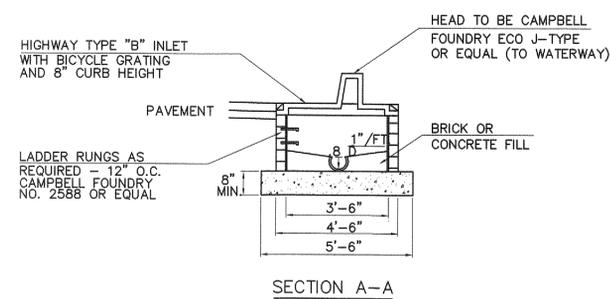
**CONCRETE DRIVEWAY APRON DETAIL**  
N.T.S.



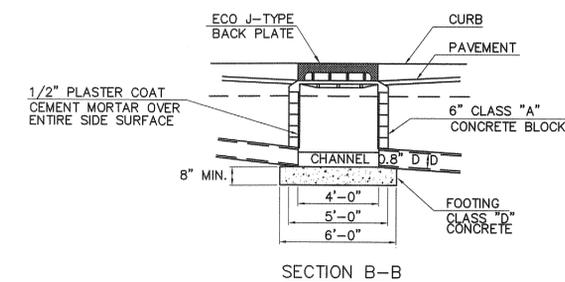
**CONCRETE DRIVEWAY APRON DETAIL**  
N.T.S.



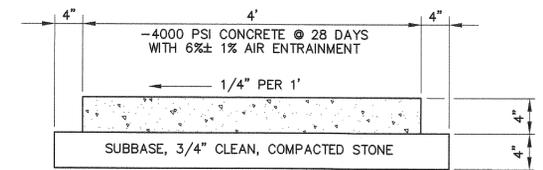
**B TYPE INLET**  
N.T.S.



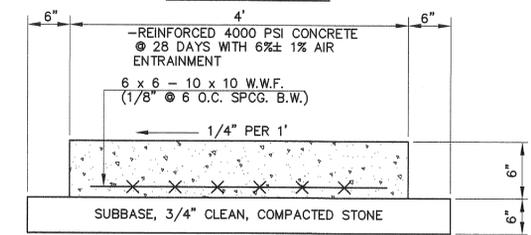
**SECTION A-A**



**SECTION B-B**



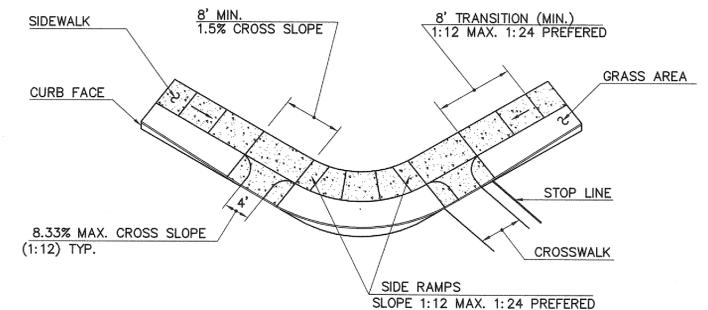
**TYPICAL SIDEWALK**



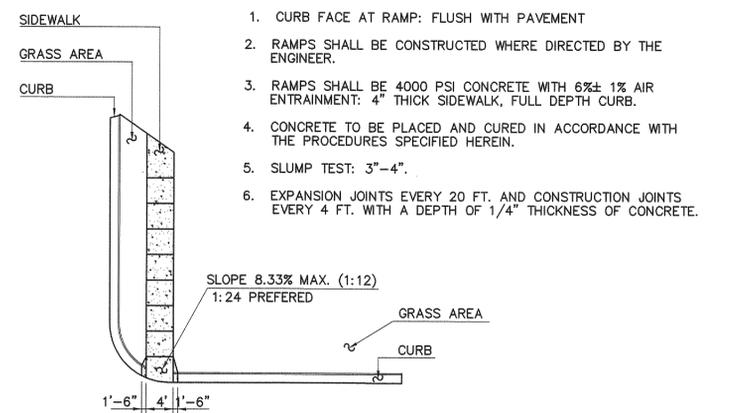
**SIDEWALK AT DRIVEWAYS**

- GENERAL NOTES:**
- ANY CONCRETE PLACED BETWEEN NOVEMBER 15 AND APRIL 1 MUST CONFORM TO ARTICLES 501.11 AND 501.17 OF THE N.J.D.O.T. STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, 1989 EDITION, USING 2% CALCIUM CHLORIDE, HOT WATER, COVERED W/SALT HAY.
  - WHERE SIDEWALK CROSSES A DRIVEWAY, THE MINIMUM THICKNESS SHALL BE 6 INCHES AND REINFORCED WITH 6"x 6", #5 WIRE MESH.
  - SLUMP TEST: 3"- 4".
  - EXPANSION JOINTS EVERY 20', CONSTRUCTION JOINTS EVERY 4' AT A DEPTH OF 1/4" THICKNESS OF CONCRETE.

**CONCRETE SIDEWALK DETAIL**  
N.T.S.



- NOTES:**
- CURB FACE AT RAMP: FLUSH WITH PAVEMENT
  - RAMPS SHALL BE CONSTRUCTED WHERE DIRECTED BY THE ENGINEER.
  - RAMPS SHALL BE 4000 PSI CONCRETE WITH 6%± 1% AIR ENTRAINMENT: 4" THICK SIDEWALK, FULL DEPTH CURB.
  - CONCRETE TO BE PLACED AND CURED IN ACCORDANCE WITH THE PROCEDURES SPECIFIED HEREIN.
  - SLUMP TEST: 3"-4".
  - EXPANSION JOINTS EVERY 20 FT. AND CONSTRUCTION JOINTS EVERY 4 FT. WITH A DEPTH OF 1/4" THICKNESS OF CONCRETE.



**HANDICAP RAMP**  
N.T.S.

**2004 ROAD IMPROVEMENTS PROGRAM  
CONSTRUCTION DETAILS**

BOROUGH OF MADISON  
DEPARTMENT OF ENGINEERING  
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MADISON, MORRIS COUNTY, N.J. 07940  
(973) 593-3060

DATE: \_\_\_\_\_  
**ROBERT A. VOGEL, P.E.**  
PROFESSIONAL ENGINEER N.J. LIC. NO. 34463

NO.	REVISIONS	DATE	BY	CHK.	APPR.

SCALE: 1" = 800'±  
DATE: 5-14-04  
DR. BY: D. BUCK  
DWG. NO. 13 of 13