



SITE LOCATION MAP
SCALE: 1" = 500'



OVERALL SITE DEVELOPMENT PLAN
SCALE: 1" = 200'

FINAL 9-LOT SUBDIVISION APPROVAL DRAWINGS

JASPER ESTATES

A.K.A.

"OLD ORCHARD STREET SUBDIVISION"

LOCATED IN:

WEST HARRISON, NEW YORK

**TOWN / VILLAGE OF HARRISON
WESTCHESTER COUNTY, NEW YORK**

NEW ROADWAY: OVERLOOK TERRACE

TOWN / VILLAGE BOARD MEMBERS

JOAN B. WALSH SUPERVISOR/MAYOR
 PATRICK A. VETERE DEPUTY SUPERVISOR/MAYOR
 JOSEPH CANNELLA COUNCILMAN/TRUSTEE
 FRED SCILIANO COUNCILMAN/TRUSTEE
 MARLANE AMELIO COUNCILWOMAN/TRUSTEE

Description	EXISTING		PROPOSED										OS
	Required	Provided	Required	LOT 1	LOT 2	LOT 3	LOT 4	LOT 5	LOT 6	LOT 7	LOT 8		
Zone District	R-1	R-1	R-1	R-1	R-1	R-1	R-1	R-1	R-1	R-1	R-1	R-1	N/A
Min. Lot Area (Ac.)	1.00	14.17	1.00	1.09	1.01	1.00	1.67	1.14	1.00	1.03	1.03	1.03	4.48
Max. Lot Coverage (%)	15	N/A	15	15	15	15	15	15	15	15	15	15	N/A
Min. Lot Width (Ft.) ⁽¹⁾	100	N/A	100	200	114	107	145	168	220	150	136	136	N/A
Yards:													
Front (Ft.)	40	N/A	40	40	40	40	40	40	40	40	40	40	N/A
Side (Ft.)	20	N/A	20	20	20	20	20	20	20	20	20	20	N/A
Rear (Ft.)	50	N/A	50	50	50	50	50	50	50	50	50	50	N/A
Min. Habitable Area (SF)	2,400	N/A	2,400	2,400	2,400	2,400	2,400	2,400	2,400	2,400	2,400	2,400	N/A
Max. Height (FT)	30	N/A	30	30	30	30	30	30	30	30	30	30	N/A

(1) Minimum at building setback line
 (2) 30' or 2 1/2 Stories

DRAWING SHEET INDEX

SHEET No.	SHEET TITLE
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5 OF 14	LAYOUT & LANDSCAPING PLAN
6 OF 14	GRADING PLAN
7 OF 14	SEDIMENT & EROSION CONTROL PLAN
8 OF 14	UTILITY PLAN
9 OF 14	ROADWAY & DRAINAGE PROFILES
10 OF 14	SEWER & WATER MAIN PROFILES
11 OF 14	DETAILS
12 OF 14	DETAILS
13 OF 14	DETAILS
14 OF 14	WJWW DETAILS

REVISIONS	SCALE	DATE	PROJECT No.	DESIGNED BY	CHECKED BY
	N.T.S.	MAY 10, 2011		MJA	MJA

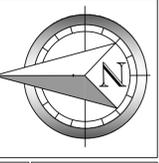
TOWN AND VILLAGE OF HARRISON
 ENGINEERING DEPARTMENT
 ALFRED F. SULLA, JR. MUNICIPAL BUILDING
 1 HERMAN PLACE
 HARRISON, NEW YORK 10528
 TEL: (914) 670-3072 FAX: (914) 895-8064



VICINITY MAP



Only copies bearing the engineer's original seal and signature shall be considered true and valid copies. Unauthorized additions and/or alterations to these plans and specifications is a violation of New York State Education Law, Section 2209 and 2210.



COVER SHEET FOR JASPER ESTATES A.K.A. OLD ORCHARD STREET SUBDIVISION
 WESTCHESTER COUNTY, N.Y.
 TOWN/VILLAGE OF HARRISON

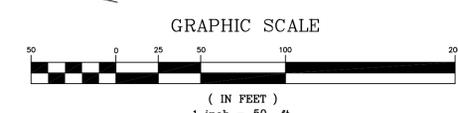
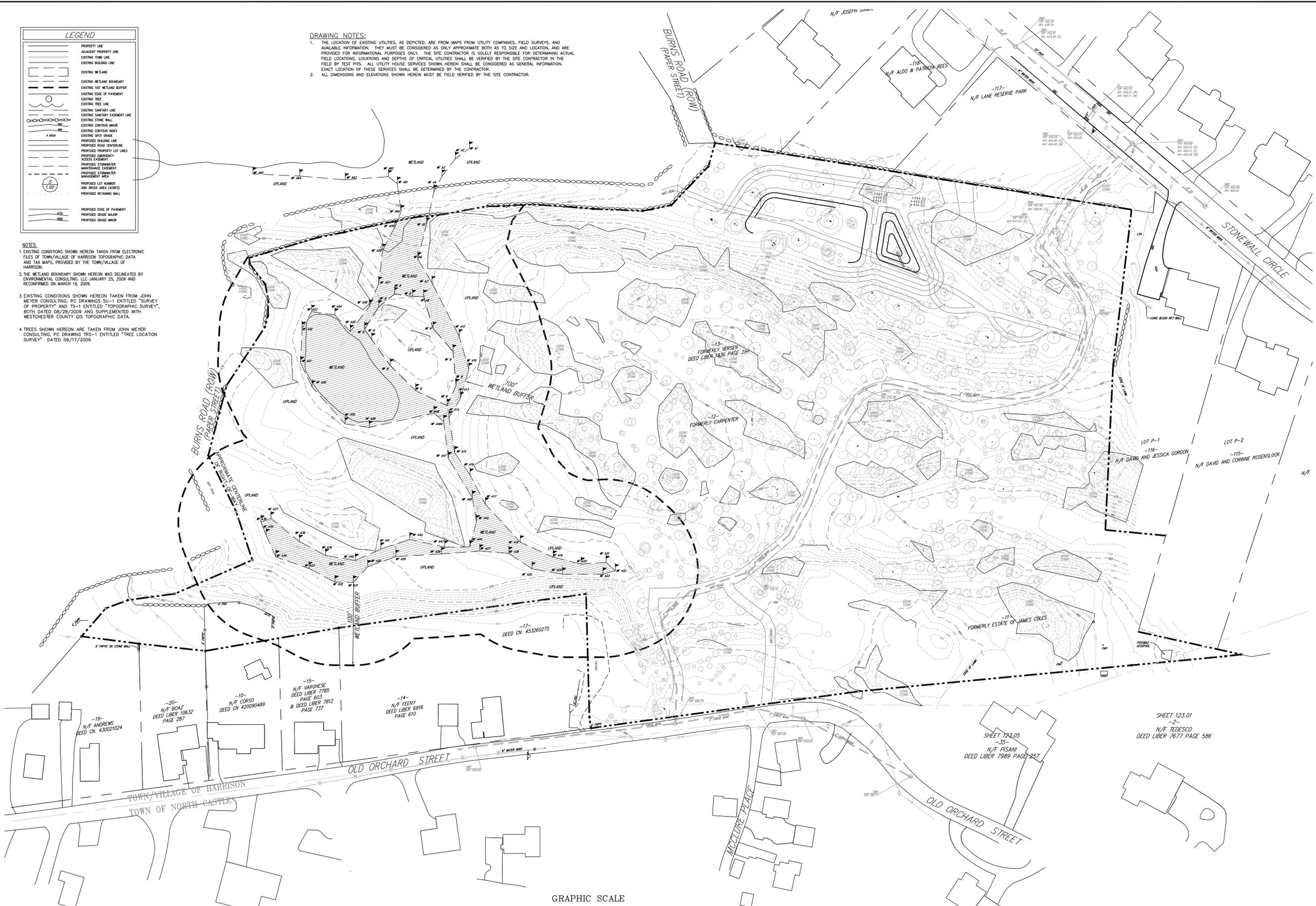
LEGEND	
[Symbol]	PROPERTY LINE
[Symbol]	ADJACENT PROPERTY LINE
[Symbol]	EXISTING TOWN LINE
[Symbol]	EXISTING BUILDING LINE
[Symbol]	EXISTING WETLAND
[Symbol]	EXISTING WETLAND BOUNDARY
[Symbol]	EXISTING 100' WETLAND BUFFER
[Symbol]	EXISTING EDGE OF PAVEMENT
[Symbol]	EXISTING TREE
[Symbol]	EXISTING TREE LINE
[Symbol]	EXISTING SANITARY LINE
[Symbol]	EXISTING SANITARY EASEMENT LINE
[Symbol]	EXISTING STONE WALL
[Symbol]	EXISTING CONTOUR MINOR
[Symbol]	EXISTING CONTOUR MAJOR
[Symbol]	EXISTING SPOT GRADE
[Symbol]	PROPOSED BUILDING LINE
[Symbol]	PROPOSED ROAD CENTERLINE
[Symbol]	PROPOSED PROPERTY LOT LINES
[Symbol]	PROPOSED EMERGENCY ACCESS EASEMENT
[Symbol]	PROPOSED STORMWATER MAINTENANCE EASEMENT
[Symbol]	PROPOSED STORMWATER MANAGEMENT AREA
[Symbol]	PROPOSED LOT NUMBER AND GROSS AREA (ACRES)
[Symbol]	PROPOSED RETAINING WALL
[Symbol]	PROPOSED EDGE OF PAVEMENT
[Symbol]	PROPOSED GRADE MAJOR
[Symbol]	PROPOSED GRADE MINOR

DRAWING NOTES:

1. THE LOCATION OF EXISTING UTILITIES, AS DEPICTED, ARE FROM MAPS FROM UTILITY COMPANIES, FIELD SURVEYS, AND AVAILABLE INFORMATION. THEY MUST BE CONSIDERED AS ONLY APPROXIMATE BOTH AS TO SIZE AND LOCATION, AND ARE PROVIDED FOR INFORMATIONAL PURPOSES ONLY. THE SITE CONTRACTOR IS SOLELY RESPONSIBLE FOR DETERMINING ACTUAL FIELD LOCATIONS, LOCATIONS AND DEPTHS OF CRITICAL UTILITIES SHALL BE VERIFIED BY THE SITE CONTRACTOR IN THE FIELD BY TEST PITS. ALL UTILITY HOUSE SERVICES SHOWN HEREIN SHALL BE CONSIDERED AS GENERAL INFORMATION. EXACT LOCATION OF THESE SERVICES SHALL BE DETERMINED BY THE CONTRACTOR.
2. ALL DIMENSIONS AND ELEVATIONS SHOWN HEREIN MUST BE FIELD VERIFIED BY THE SITE CONTRACTOR.

NOTES:

1. EXISTING CONDITIONS SHOWN HEREON TAKEN FROM ELECTRONIC FILES OF TOWN/VILLAGE OF HARRISON TOPOGRAPHIC DATA AND TAX MAPS, PROVIDED BY THE TOWN/VILLAGE OF HARRISON.
2. THE WETLAND BOUNDARY SHOWN HEREON WAS DELINEATED BY ENVIRONMENTAL CONSULTING, LLC JANUARY 25, 2009 AND RECONFIRMED ON MARCH 19, 2009.
3. EXISTING CONDITIONS SHOWN HEREON TAKEN FROM JOHN MEYER CONSULTING, P.C. DRAWINGS SU-1 ENTITLED "SURVEY OF PROPERTY" AND TS-1 ENTITLED "TOPOGRAPHIC SURVEY", BOTH DATED 06/28/2009 AND SUPPLEMENTED WITH WESTCHESTER COUNTY GIS TOPOGRAPHIC DATA.
4. TREES SHOWN HEREON ARE TAKEN FROM JOHN MEYER CONSULTING, P.C. DRAWING TRS-1 ENTITLED "TREE LOCATION SURVEY" DATED 09/17/2009.



EXISTING CONDITION PLAN
SCALE: 1" = 50'

REVISIONS	SCALE	DATE	PROJECT NO.	MUNICIPALITY
	1" = 50'	MAY 10, 2011	11-27	HARRISON, N.Y.
TOWN AND VILLAGE OF HARRISON		ENGINEERING DEPARTMENT		DESIGNED BY
ALFRED F. BULLA, JR. MUNICIPAL BUILDING		1 HERMAN PLACE		DRAWN BY
HARRISON, NEW YORK 10528				CHECKED BY
				DATE

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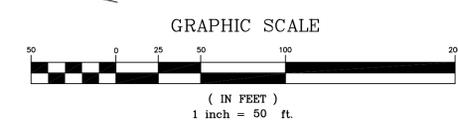
EXISTING CONDITION PLAN
FOR
JASPER ESTATES
A.K.A.
OLD ORCHARD STREET SUBDIVISION
TOWN/VILLAGE OF HARRISON
WESTCHESTER COUNTY, N.Y.

SHEET NUMBER
2 OF 14

LEGEND	
[Symbol]	PROPERTY LINE
[Symbol]	ADJACENT PROPERTY LINE
[Symbol]	EXISTING TOWN LINE
[Symbol]	EXISTING BUILDING LINE
[Symbol]	EXISTING WETLAND
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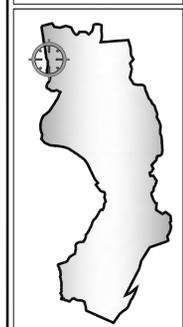
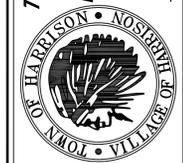
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		Range Beg.	Range End	Percent
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[Color]	Surface Existing-TP-SRF_RNG2	25.00	35.00	25.0
[Color]	Surface Existing-TP-SRF_RNG3	35.00	1000.00	29.4
				133644.52
				73026.94
				85964.55

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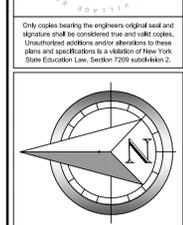


REVISIONS	
SCALE	1" = 50'
DATE	MAY 10, 2011
PROJECT NO.	11-27
M.A.	M.A.
DESIGNED BY	FB
CHECKED BY	FB
DATE	

TOWN AND VILLAGE OF HARRISON
ENGINEERING DEPARTMENT
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 HARRISON, NEW YORK 10528
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VICINITY MAP
 TOWN AND VILLAGE ENGINEERS
 1000 WESTCHESTER AVENUE
 WESTCHESTER, NY 10580
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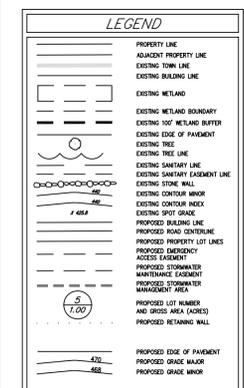
EXISTING SLOPES MAP
 FOR
JASPER ESTATES
 A.K.A.
OLD ORCHARD STREET SUBDIVISION
 WESTCHESTER COUNTY, N.Y.

SHEET NUMBER
3 OF **14**

EXISTING SLOPES MAP
 SCALE: 1" = 50'

| TREE NO. | SPECIES & DBH |
|----------|---------------|----------|---------------|----------|---------------|----------|---------------|
| 4814 | MAPLE 8" DBH |
| 4815 | MAPLE 8" DBH |
| 4816 | MAPLE 8" DBH |
| 4817 | MAPLE 8" DBH |
| 4818 | MAPLE 8" DBH |
| 4819 | MAPLE 8" DBH |
| 4820 | MAPLE 8" DBH |
| 4821 | MAPLE 8" DBH |
| 4822 | MAPLE 8" DBH |
| 4823 | MAPLE 8" DBH |
| 4824 | MAPLE 8" DBH |
| 4825 | MAPLE 8" DBH |
| 4826 | MAPLE 8" DBH |
| 4827 | MAPLE 8" DBH |
| 4828 | MAPLE 8" DBH |
| 4829 | MAPLE 8" DBH |
| 4830 | MAPLE 8" DBH |
| 4831 | MAPLE 8" DBH |
| 4832 | MAPLE 8" DBH |
| 4833 | MAPLE 8" DBH |
| 4834 | MAPLE 8" DBH |
| 4835 | MAPLE 8" DBH |
| 4836 | MAPLE 8" DBH |
| 4837 | MAPLE 8" DBH |
| 4838 | MAPLE 8" DBH |
| 4839 | MAPLE 8" DBH |
| 4840 | MAPLE 8" DBH |
| 4841 | MAPLE 8" DBH |
| 4842 | MAPLE 8" DBH |
| 4843 | MAPLE 8" DBH |
| 4844 | MAPLE 8" DBH |
| 4845 | MAPLE 8" DBH |
| 4846 | MAPLE 8" DBH |
| 4847 | MAPLE 8" DBH |
| 4848 | MAPLE 8" DBH |
| 4849 | MAPLE 8" DBH |
| 4850 | MAPLE 8" DBH |
| 4851 | MAPLE 8" DBH |
| 4852 | MAPLE 8" DBH |
| 4853 | MAPLE 8" DBH |
| 4854 | MAPLE 8" DBH |
| 4855 | MAPLE 8" DBH |
| 4856 | MAPLE 8" DBH |
| 4857 | MAPLE 8" DBH |
| 4858 | MAPLE 8" DBH |
| 4859 | MAPLE 8" DBH |
| 4860 | MAPLE 8" DBH |
| 4861 | MAPLE 8" DBH |
| 4862 | MAPLE 8" DBH |
| 4863 | MAPLE 8" DBH |
| 4864 | MAPLE 8" DBH |
| 4865 | MAPLE 8" DBH |
| 4866 | MAPLE 8" DBH |
| 4867 | MAPLE 8" DBH |
| 4868 | MAPLE 8" DBH |
| 4869 | MAPLE 8" DBH |
| 4870 | MAPLE 8" DBH |
| 4871 | MAPLE 8" DBH |
| 4872 | MAPLE 8" DBH |
| 4873 | MAPLE 8" DBH |
| 4874 | MAPLE 8" DBH |
| 4875 | MAPLE 8" DBH |
| 4876 | MAPLE 8" DBH |
| 4877 | MAPLE 8" DBH |
| 4878 | MAPLE 8" DBH |
| 4879 | MAPLE 8" DBH |
| 4880 | MAPLE 8" DBH |
| 4881 | MAPLE 8" DBH |
| 4882 | MAPLE 8" DBH |
| 4883 | MAPLE 8" DBH |
| 4884 | MAPLE 8" DBH |
| 4885 | MAPLE 8" DBH |
| 4886 | MAPLE 8" DBH |
| 4887 | MAPLE 8" DBH |
| 4888 | MAPLE 8" DBH |
| 4889 | MAPLE 8" DBH |
| 4890 | MAPLE 8" DBH |
| 4891 | MAPLE 8" DBH |
| 4892 | MAPLE 8" DBH |
| 4893 | MAPLE 8" DBH |
| 4894 | MAPLE 8" DBH |
| 4895 | MAPLE 8" DBH |
| 4896 | MAPLE 8" DBH |
| 4897 | MAPLE 8" DBH |
| 4898 | MAPLE 8" DBH |
| 4899 | MAPLE 8" DBH |
| 4900 | MAPLE 8" DBH |

*ALL TREES ON THIS LIST, MARKED "RMV" ARE TO BE REMOVED. THESE TREES ARE ALSO MARKED WITH AN "X" ON THE PLAN. ANY TREE NOT MARKED IS TO BE SAVED.



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SCALE	1" = 50'
DATE	MAY 10, 2011
PROJECT NO.	11-27
M/JA	FB
M/JA	FB
DESIGNER	CS&G
CHECKED BY	CS&G

TOWN AND VILLAGE OF HARRISON
ENGINEERING DEPARTMENT
 ALFRED F. SULLA, JR. MUNICIPAL BUILDING
 1 HERMAN PLACE
 HARRISON, NEW YORK 10528
 TEL: (914) 670-3072 FAX: (914) 835-5064

TREE REMOVAL & DEMOLITION PLAN
 FOR **JASPER ESTATES**
 A.K.A. **OLD ORCHARD STREET SUBDIVISION**
 TOWN/VILLAGE OF HARRISON, WESTCHESTER COUNTY, N.Y.

SHEET NUMBER
 4 OF 14

TREE REMOVAL & DEMOLITION PLAN
 SCALE: 1" = 50'

LANDSCAPING LEGEND	
	PROPOSED DECIDUOUS TREE
	PROPOSED EVERGREEN TREE
	PROPOSED SHRUB
	PROPOSED SHRUB MASSING

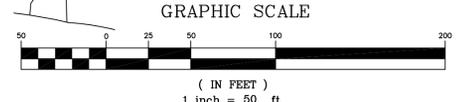
SIGN TABLE							
DESIGN SIGN NUMBER	SHOW	SIZE	DESCRIPTION	MARKING TYPE	MARKING HEIGHT	REGULATORY	REPLACEMENT
A		30"x30"	WHITE ON RED	STEEL CHANNEL	7'-0"	R1-1	X
B		36"x30"	BLACK ON WHITE	STEEL POLE	7'-0"	R1-1	X
C		36"x30"	BLACK ON WHITE	STEEL POLE	7'-0"	R1-1	X

PROPOSED PLANTING SCHEDULE				
QUANTITY	KEY	BOTANICAL NAME	COMMON NAME	REMARKS
TREES				
8	AP	ACEQUILIFOLIUM	STRIPED MAPLE	8'-10" HT B&B
3	CC	CERES CANADENSIS	EASTERN REDBUD	8'-10" HT B&B
6	CL	CUPRESSOCYPRIS LEVLANDI	LEVLANI CYPRUSS	8'-10" HT B&B
5	PAP	PICEA PUNGENS	COLORADO SPRUCE	8'-10" HT B&B
7	PCA	PIRUS CALLELYANA 'ARISTOCRAT'	ARISTOCRAT FLOWERING PEAR	3' - 3 1/2" CAL B&B
2	PS	PINUS STROBUS	WHITE PINE	8'-10" HT B&B
14	QP	QUERCUS PALustris	PIN OAK	3' - 3 1/2" CAL B&B
SHRUBS				
19	CS	CORNUS SERICEA	REDOSER DOGWOOD	4'-5" HT CONT
61	KL	KALMA LATIFOLIA	MOUNTAIN LAUREL	3' - 3 1/2" HT B&B
22	VP	VEURNIUM PRAGENSE	PRAGUE VEURNIUM RHODODENDRUM	4'-5" HT B&B

- NOTES:**
- ALL PLANT MATERIAL SHALL BE FIRST QUALITY STOCK, PLANTED MATERIAL AND METHODS OF INSTALLATION SHALL CONFORM TO THE AMERICAN NURSERY AND LANDSCAPE ASSOCIATION, AMERICAN STANDARD FOR NURSERY STOCK, LATEST EDITION.
 - ALL AREAS OF THE SITE NOT OCCUPIED BY BUILDING OR PAVEMENT AND NOT SPECIFIED AS BEING PLANTED WITH TREES, SHRUBS OR GROUND COVER SHALL BE LAWN.
 - ALL PLANTING BEDS SHALL BE MULCHED WITH 3" OF BROWN MULCH. MULCH SHALL BE CLEAN, NON-DYED, TOXIC FREE, SHREDDED HARDWOOD.
 - PLANT MATERIALS AS SPECIFIED ON THE DRAWINGS AND DELIVERED TO THE SITE SHALL BE NURSERY GROWN AND CERTIFIED TRUE TO THEIR GENUS, SPECIES AND VARIETY. SUBSTITUTIONS ARE NOT PERMITTED WITHOUT THE PROJECT LANDSCAPE ARCHITECT'S WRITTEN APPROVAL.
 - ALL LANDSCAPING SHALL CONTINUE TO BE MAINTAINED IN A HEALTHY GROWING CONDITION THROUGHOUT THE DURATION OF THE PROJECT. ANY PLANTING NOT SO MAINTAINED SHALL BE REPLACED WITH NEW PLANTS AT THE BEGINNING OF THE NEXT, IMMEDIATELY FOLLOWING, GROWING SEASON.
 - ALL TREES AND SHRUBS SHALL BE PRUNED AND SHAPED TO BE SUBJECT TO THE APPROVAL OF THE PROJECT LANDSCAPE ARCHITECT AND GOVERNMENTAL AUTHORITIES HAVING JURISDICTION.
 - PLANTING STOCK SHALL BE WELL-BRANCHED AND WELL-FORMED, SOUND, VIGOROUS, HEALTHY, FREE FROM DISEASE, SUN-SCALE, WINDBURN, ASPHEN, AND HARMFUL INSECTS OR INSECT EGGS, AND SHALL HAVE HEALTHY, NORMAL, UNBROKEN ROOT SYSTEMS. DECIDUOUS TREES AND SHRUBS SHALL BE SYMMETRICALLY DEVELOPED, OF UNIFORM HABIT OF GROWTH, WITH STRAIGHT TRUNKS OR STEMS, AND FREE FROM OBJECTIONABLE DISFIGUREMENTS. EVERGREEN TREES AND SHRUBS SHALL HAVE WELL-DEVELOPED SYMMETRICAL TOPS WITH TYPICAL SPREAD OF BRANCHES FOR EACH PARTICULAR SPECIES OR VARIETY. ONLY VINES AND GROUND COVER PLANTS WELL ESTABLISHED IN REMOVAL CONTAINERS, INTERNAL CONTAINERS, OR FORMER HOMOGENEOUS SOIL SECTIONS SHALL BE USED. PLANTS SHALL BE GROWN UNDER CLIMATIC CONDITIONS SIMILAR TO THOSE IN THE LOCALITY OF THE PROJECT.
 - ALL STOCK SHALL BE BALLED AND BURLAPPED OR CONTAINER GROWN STOCK, UNLESS OTHERWISE SPECIFIED. BARERoot STOCK OF ANY KIND IS UNACCEPTABLE UNLESS SPECIFIED.
 - ALL PLANTING BEDS, LAWNS AND LANDSCAPED AREAS SHALL RECEIVE A MINIMUM 4" THICK LAYER OF TOPSOIL, UNLESS OTHERWISE SPECIFIED.
 - GRASS SEED FOR LAWN AREAS SHALL BE MIXED AND GUARANTEED BY A SUPPLIER AS INDICATED BELOW FOR THE FOLLOWING USES:
 - A. PERMANENT GRASS SEED:-
 - PERENNIAL RYEGRASS 20%
 - KENTUCKY BLUEGRASS 50%
 - CREeping RED FESCUE 30%
 - B. PERMANENT GRASS SEED FOR INFILTRATION BASIN:-
 - CREeping RED FESCUE 50%
 - HARD FESCUE 30%
 - SHEEPS FESCUE 20%
 - C. TEMPORARY GRASS SEED:- 100% ANNUAL RYEGRASS
 - D. TOTAL WEED CONTENT SHALL NOT EXCEED 1.5% OF TOTAL SEED MIXTURE.

LEGEND	
	PROPERTY LINE
	ADJACENT PROPERTY LINE
	EXISTING TOWN LINE
	EXISTING BUILDING LINE
	EXISTING WETLAND
	EXISTING WETLAND BOUNDARY
	EXISTING 100' WETLAND BUFFER
	EXISTING EDGE OF PAVEMENT
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- NOTES:**
- EXISTING CONDITIONS SHOWN HEREON TAKEN FROM ELECTRONIC FILES OF TOWN/VILLAGE OF HARRISON TOPOGRAPHIC DATA AND TAX MAPS, PROVIDED BY THE TOWN/VILLAGE OF HARRISON.
 - ALIGNMENT & STATIONS SHOWN ON THIS SHEET REPRESENTS THE CENTER LINE OF THE NEW ROADWAY. THE STATIONING BEGINS AT THE INTERSECTION WITH THE WESTERN EDGE OF PAVEMENT OF OLD ORCHARD.

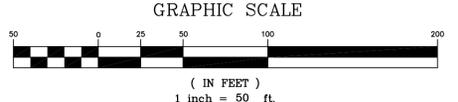


REVISIONS SCALE 1" = 50' DATE MAY 10, 2011 PROJECT NO. 11-27 N.J.A. FB N.J.A. FB DRAWN BY CHECKED BY	TOWN AND VILLAGE OF HARRISON ENGINEERING DEPARTMENT ALFRED F. SULLA, JR., MUNICIPAL BUILDING 1 HERMAN PLACE HARRISON, NEW YORK 10528 TEL: (914) 670-3072 FAX: (914) 835-8064	 	LAYOUT & LANDSCAPING PLAN FOR JASPER ESTATES A.K.A. OLD ORCHARD STREET SUBDIVISION WESTCHESTER COUNTY, N.Y. <hr/> SHEET NUMBER <div style="font-size: 2em; font-weight: bold; text-align: center;">5</div> OF <div style="font-size: 2em; font-weight: bold; text-align: center;">14</div>
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LAYOUT & LANDSCAPING PLAN
SCALE: 1" = 50'

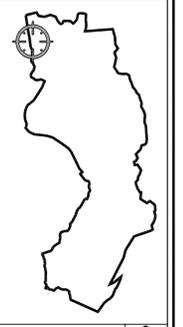
LEGEND	
	PROPERTY LINE
	ADJACENT PROPERTY LINE
	EXISTING TOWN LINE
	EXISTING BUILDING LINE
	EXISTING WETLAND
	EXISTING WETLAND BOUNDARY
	EXISTING 100' WETLAND BUFFER
	EXISTING EDGE OF PAVEMENT
	EXISTING TREE
	EXISTING UTILITY LINE
	EXISTING SANITARY EASEMENT LINE
	EXISTING STONE WALL
	EXISTING CONTOUR MARKER
	EXISTING CONTOUR INDEX
	EXISTING SPOT GRADE
	PROPOSED BUILDING LINE
	PROPOSED ROAD CENTERLINE
	PROPOSED PROPERTY LOT LINES
	PROPOSED EMERGENCY ACCESS EASEMENT
	PROPOSED STORMWATER MAINTENANCE EASEMENT
	PROPOSED STORMWATER MANAGEMENT AREA
	PROPOSED LOT NUMBER AND GROSS AREA (ACRES)
	PROPOSED RETAINING WALL
	PROPOSED EDGE OF PAVEMENT
	PROPOSED GRADE MAJOR
	PROPOSED GRADE MINOR

NOTES:
 1. EXISTING CONDITIONS SHOWN HEREON TAKEN FROM ELECTRONIC FILES OF TOWN/VILLAGE OF HARRISON TOPOGRAPHIC DATA AND TAX MAPS, PROVIDED BY THE TOWN/VILLAGE OF HARRISON.
 2. ALIGNMENT & STATIONS SHOWN ON THIS SHEET REPRESENTS THE CENTER LINE OF THE NEW ROADWAY. THE STATIONING BEGINS AT THE INTERSECTION WITH THE WESTERN EDGE OF PAVEMENT OF OLD ORCHARD STREET.



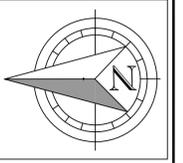
SCALE	1" = 50'
DATE	MAY 10, 2011
PROJECT NO.	11-27
M/JA	FB
DESIGNED BY	MAJORITY
CHECKED BY	

TOWN AND VILLAGE OF HARRISON
 ENGINEERING DEPARTMENT
 ALFRED F. SULLA, JR. MUNICIPAL BUILDING
 1 HERMAN PLACE
 HARRISON, NEW YORK 10528
 TEL: (914) 670-3072 FAX: (914) 835-8064



VICINITY MAP
 TOWN AND VILLAGE OF HARRISON
 HARRISON, NEW YORK

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GRADING PLAN
 FOR
 JASPER ESTATES
 A.K.A.
 OLD ORCHARD STREET SUBDIVISION
 TOWN/VILLAGE OF HARRISON
 WESTCHESTER COUNTY, N.Y.

SHEET NUMBER
 6 OF 14

GRADING PLAN
 SCALE: 1" = 50'

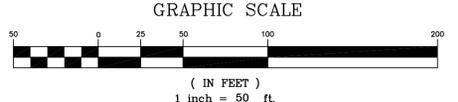
LEGEND	
	PROPERTY LINE
	ADJACENT PROPERTY LINE
	EXISTING TONN LINE
	EXISTING BUILDING LINE
	EXISTING WETLAND
	EXISTING WETLAND BOUNDARY
	EXISTING 100' WETLAND BUFFER
	EXISTING EDGE OF PAVEMENT
	EXISTING TREE
	EXISTING TREE LINE
	EXISTING SANITARY LINE
	EXISTING SANITARY EXEMPTION LINE
	EXISTING STONE WALL
	EXISTING CONTOUR MINOR
	EXISTING SPOT GRADE
	PROPOSED BUILDING LINE
	PROPOSED ROAD CENTERLINE
	PROPOSED PROPERTY LOT LINES
	PROPOSED EASEMENT
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	PROPOSED STORMWATER MANAGEMENT AREA
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	PROPOSED EDGE OF PAVEMENT
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NOTES:
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NOTES:

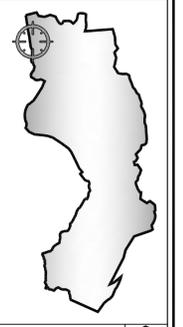
- EXISTING CONDITIONS SHOWN HEREON TAKEN FROM JOHN MEYER CONSULTING, PC DRAWINGS SU-1 ENTITLED "SURVEY OF PROPERTY" AND TS-1 ENTITLED "TOPOGRAPHIC SURVEY", BOTH DATED 08/28/2009 AND SUPPLEMENTED WITH WESTCHESTER COUNTY GIS TOPOGRAPHIC DATA.
- ALL SEDIMENT AND EROSION CONTROL MEASURES SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH ALL THE PLANS, PRIOR TO BEGINNING ANY CLEARING, GRUBBING OR EXCAVATION.
- SILT FENCE SHALL BE INSTALLED AS SHOWN ON THIS DRAWING PRIOR TO BEGINNING ANY CLEARING AND GRUBBING OR EARTHWORK.
- EXPOSED SLOPES AND ALL GRADED AREAS SHALL BE SEEDED WITH THE FOLLOWING GRASS MIX IMMEDIATELY UPON COMPLETION OF ITS CONSTRUCTION AT A RATE OF 6 POUNDS PER 1000 S.F. IN THE FOLLOWING PROPORTIONS:
 CREEPING RED FESCUE 70%
 PERENNIAL RYE GRASS 30%
- GRASS SEED MIX FOR SEDIMENT AND EROSION CONTROL MAY BE APPLIED BY EITHER MECHANICAL OR HYDROSEEDING METHODS. HYDROSEEDING SHALL BE PERFORMED IN ACCORDANCE WITH THE AMERICAN NURSERY AND LANDSCAPE ASSOCIATION, AMERICAN STANDARD FOR NURSERY STOCK, LATEST EDITION.
- SEEDED AREAS SHALL BE MULCHED WITH STRAW AT A RATE OF 2 TONS PER ACRE (90 LBS. PER 1,000 S.F.) SUCH THAT THE MULCH FORMS A CONTINUOUS BLANKET.
- SEDIMENT AND EROSION CONTROL MEASURES SHALL BE INSPECTED AND MAINTAINED ON A DAILY BASIS BY THE CONTRACTOR. ALL COLLECTED SEDIMENT WITHIN SEDIMENT BARRIERS SHALL BE REMOVED PERIODICALLY TO MAINTAIN THE FUNCTION OF THE SEDIMENT BARRIER. ALL SEDIMENT COLLECTED SHALL BE RESPREAD ON-SITE WITHIN STABILIZED AREAS AS DIRECTED BY THE OWNERS FIELD REPRESENTATIVE.
- DUST SHALL BE CONTROLLED BY SPRINKLING OR OTHER APPROVED METHODS AS NECESSARY, OR AS DIRECTED BY THE CONTRACTOR.
- ALL FILLS SHALL BE COMPACTED TO PROVIDE STABILITY OF MATERIAL AND TO PREVENT SETTLEMENT.
- EXCAVATIONS AND FILLS SHALL NOT ENDANGER ADJOINING PROPERTIES, NOR DIVERT WATER ONTO THE PROPERTY OF OTHERS.
- THE CONTRACTOR SHALL INSPECT DOWNSTREAM CONDITIONS FOR EVIDENCE OF SEDIMENTATION ON A WEEKLY BASIS AND AFTER RAINSTORMS.
- AS WARRANTED BY FIELD CONDITIONS, SPECIAL ADDITIONAL SEDIMENT AND EROSION CONTROL MEASURES SHALL BE INSTALLED BY THE CONTRACTOR AS REQUIRED.
- STOCKPILING OF CONSTRUCTION MATERIAL SHALL BE PLACED ON-SITE IN THE AREA DESIGNATED. STOCKPILED EXCAVATED MATERIAL SHALL HAVE SILT FENCE LOCATED AROUND PERIMETER. ALL STOCKPILED MATERIAL SHALL BE MAINTAINED IN AN ORDERLY MANNER SO AS NOT TO IMPEDE ON EXISTING TRAFFIC CIRCULATION ROUTES.
- THIS PLAN IS FOR SEDIMENT AND EROSION CONTROL INFORMATION ONLY.



SEDIMENT & EROSION CONTROL PLAN
 SCALE: 1" = 50'

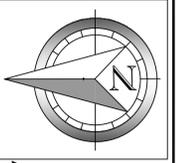
NO.	REVISIONS

SCALE 1" = 50'
 DATE MAY 10, 2011
 PROJECT NO. 11-27
 MJA FB MJA
 CHECKED BY: [Signature]
 DRAWN BY: [Signature]



VICINITY MAP
 TOWN AND VILLAGE OF HARRISON
 WESTCHESTER COUNTY, N.Y.

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SEDIMENT & EROSION CONTROL PLAN
 FOR
JASPER ESTATES
 A.K.A.
OLD ORCHARD STREET SUBDIVISION
 TOWN/VILLAGE OF HARRISON
 WESTCHESTER COUNTY, N.Y.

SHEET NUMBER
7 OF **14**

PROPOSED WATER MAIN / TEMPORARY WATER SERVICE AND ALL APPURTENANCES APPROVED BY THE WESTCHESTER JOINT WATER WORKS:

DATE: _____ BY: Mr. Anthony Conetta, P.E.
WJWW MANAGER

UTILITY NOTES:

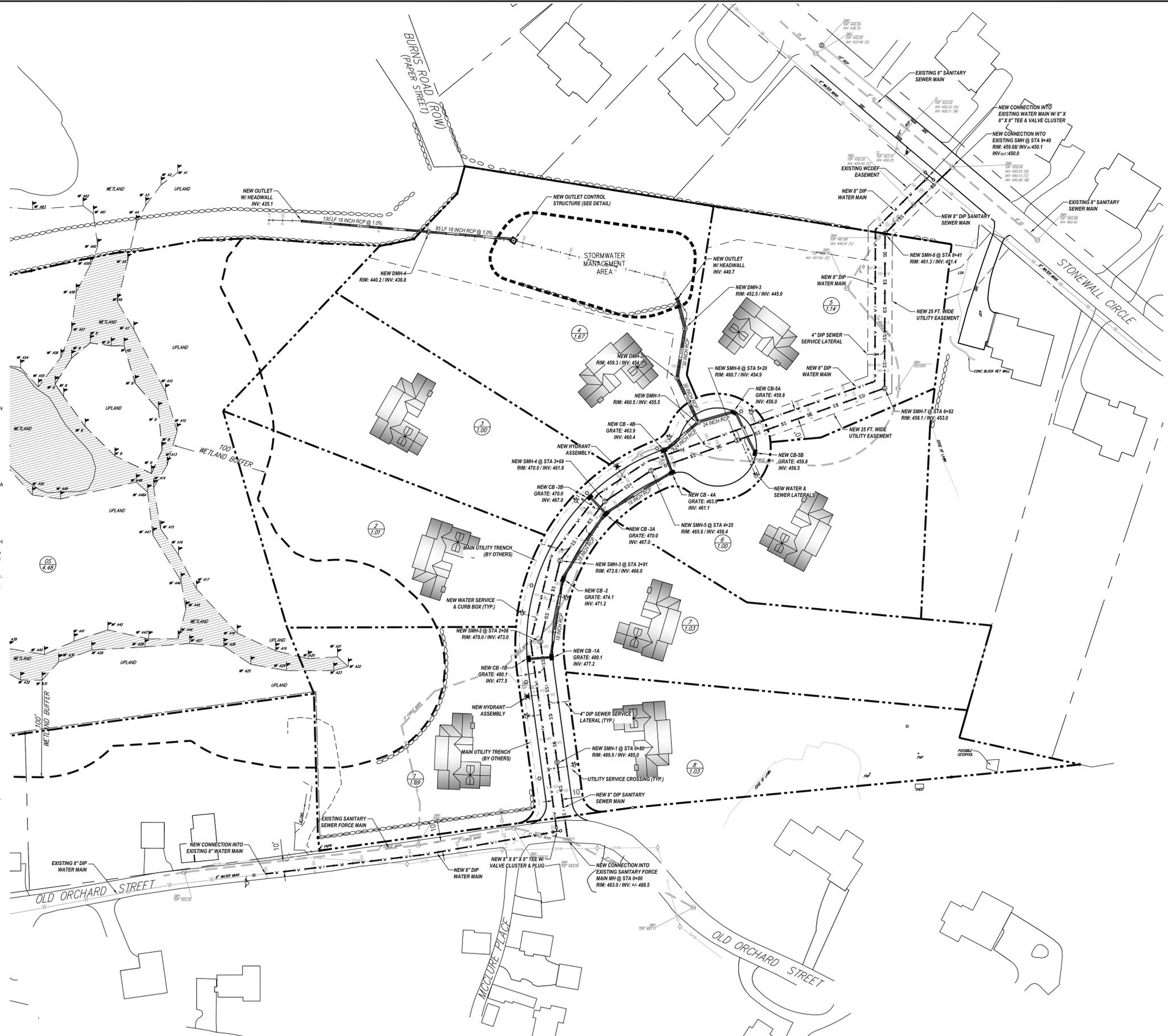
- ALL DIMENSIONS AND ELEVATIONS SHOWN HEREIN MUST BE FIELD VERIFIED BY THE SITE CONTRACTOR.
- ALL UTILITIES TO REMAIN MUST BE SUFFICIENTLY PROTECTED THROUGHOUT THE COURSE OF WORK.
- SYMBOLS UTILIZED FOR DRAINAGE MANHOLES, CATCH BASINS, FIELD INLETS, DRAINAGE INLETS, SANITARY MANHOLES, FIRE HYDRANTS AND VALVES ARE NOT ACTUAL SIZE. THESE SYMBOLS ARE OVERSIZED FOR CLARITY AND HELP MAKE THE PLAN MORE READABLE.
- ALL SANITARY SEWER AND WATER MAIN PIPE SHALL BE 8-INCH DIP CLASS 52.
- ALL DRAINAGE PIPE SHALL BE RCP HAVING DIAMETERS OF 18", 24", AND 30". ALL DRAIN PIPES WITHIN ROADWAY, CROSSING SEWER AND WATER MAINS, SHALL BE 18" DIAMETER.
- ALL SEWER LATERALS SHALL BE 4 INCH DIP @ 2% MIN SLOPE. LOCATION OF LATERALS TO BE DETERMINED BY TOWN ENGINEER.
- ALL WATER SERVICE LATERALS AND HYDRANTS SHALL BE IN ACCORDANCE WITH WJWW RULES AND REGULATIONS. LOCATION OF LATERAL SHALL BE DETERMINED BY TOWN ENGINEER.
- ALL STREET LIGHTS SHOWN HEREON ARE APPROXIMATE IN LOCATION. LOCATION SHALL BE DETERMINED BY TOWN ENGINEER.
- MAIN UTILITY TRENCH TO BE PERFORMED BY OTHERS.
- UTILITY TRENCH SERVICE CROSSINGS SHALL BE INSTALLED IN THIS CONTRACT.
- LOCATION OF ALL WATER MAIN VALVES AND CURB BOXES SHALL BE APPROVED BY WJWW.
- ALIGNMENTS SHOWN HEREON ARE SPECIFIC TO THE INDIVIDUAL UTILITY.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO BYPASS THE EXISTING SANITARY SEWER IN ACCORDANCE WITH WCDH RULES AND REGULATIONS THROUGHOUT THE COURSE OF THE JOB.
- SEE UTILITY PROFILES FOR MORE DETAILED INFORMATION.
- THE NEW WATER MAIN SHALL MAINTAIN 10 FEET OF SEPARATION FROM ANY SEWER PIPE OR STRUCTURE OR OTHERWISE BE ENCASED IN K-CRETE.

WJWW STANDARD NOTES:

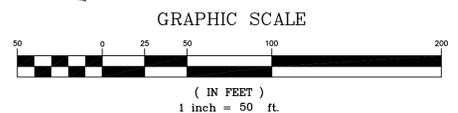
- THE WATER MAIN SHALL HAVE A MINIMUM COVER OF 4'-0" AND A MAXIMUM COVER OF 5'-6", UNLESS SPECIFICALLY DETAILED.
- ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE LATEST REVISION OF THE FOLLOWING: AMERICAN WATER WORKS ASSOCIATION (AWWA) STANDARD C-600, NEW YORK STATE SANITARY CODE, PART 5, RECOMMENDED STANDARDS FOR WATER WORKS, WESTCHESTER JOINT WATER WORKS.
- LEAKAGE AND PRESSURE TESTING, DESCRIBED IN SECTION 15.1 OF THE SPECIFICATIONS, SHALL CONFORM TO AWWA C-600, OF LATEST REVISION.
- THE WESTCHESTER COUNTY DEPARTMENT OF HEALTH MUST BE NOTIFIED AT LEAST 48 HOURS IN ADVANCE OF THE PRESSURE TESTING.
- DISINFECTION, SHALL CONFORM TO AWWA C-651-99, LATEST EDITION EXCEPT THAT C-651-99 SECTION 4.4.2, "THE TABLET METHOD", SHALL NOT BE UTILIZED.
- BACTERIOLOGICAL SAMPLES ARE REQUIRED FOR EVERY 1,200 FT. OF MAIN INSTALLED AND FROM ALL DEAD ENDS. SAMPLES MUST BE TAKEN ON TWO (2) CONSECUTIVE DAYS.
- WATER MAIN SHALL BE CLASS 52 DUCTILE IRON PIPE, PUSH JOINT, WITH A CEMENT MORTAR LINING. PIPE TO BE MANUFACTURED IN ACCORDANCE WITH LATEST REVISION OF AWWA C-100.
- THE WESTCHESTER JOINT WATER WORKS DOES NOT GUARANTEE THE LOCATION OR EXTENT OF ANY UNDERGROUND UTILITY. THE DATA SHOWN IS BASED UPON THE BEST AVAILABLE INFORMATION. ALL PROVISIONS OF NEW YORK STATE INDUSTRIAL CODE RULE 53 MUST BE FOLLOWED.
- MAINTAIN SEPARATION OF WATER AND SEWER IN ACCORDANCE WITH THE WESTCHESTER COUNTY DEPARTMENT OF HEALTH AS DESCRIBED IN STANDARD DETAILS SD-1, DETAILS 7 & 8 OF THE PLANS.
- TEMPORARY WATER SERVICE (WHEN REQUIRED) TO ALL AFFECTED CUSTOMERS SHALL BE PROVIDED BY AN ABOVE GROUND TEMPORARY NETWORK OF HYDRAULICALLY SIZED WATER MAINS. ALL TEMPORARY WATER MAINS MUST BE DISINFECTED IN ACCORDANCE WITH AWWA STANDARD C-651 AS DESCRIBED IN NOTE 5 ABOVE. TEMPORARY WATER MAINS SHALL BE PLACED INTO SERVICE ONLY AFTER SATISFACTORY BACTERIOLOGICAL RESULTS HAVE BEEN RECEIVED AND THE WESTCHESTER COUNTY DEPARTMENT OF HEALTH HAS GRANTED APPROVAL OF SAME.
- NO SERVICE TAPS CAN BE MADE OR CONTROL VALVES OPENED ON THE NEW MAIN UNTIL NOTES 3 & 4 ABOVE ARE COMPLETED WITH AND THE RESULTS ARE APPROVED AND ACCEPTED BY THE WCDH.
- THRUST BLOCKS AS SHOWN ON DETAILS 1 TO 6 SHALL BE INSTALLED IN CONFORMANCE WITH THE SIZE OF PIPE TO BE INSTALLED AND THEN ONLY IF THE CONDITIONS DEPICTED OCCUR. WHERE THE SEPARATION BETWEEN WATER MAIN AND SEWER AS SHOWN ON STANDARD DETAILS 7 & 8 CANNOT BE ACCOMPLISHED, SPECIAL PROTECTION AS SHOWN ON THE DRAWINGS SHALL BE PROVIDED. BLOCKS SHALL BE INSTALLED IN CONFORMANCE WITH STANDARD DETAIL 9 AT DEAD ENDS OR IF SO ORDERED AT OTHER LOCATIONS. HYDRANTS SHALL BE INSTALLED IN CONFORMANCE WITH STANDARD DETAIL 10 WHEN A HYDRANT IS ORDERED INSTALLED. ENCASE WATER MAIN IN AREAS WHERE VERTICAL CLEARANCE FROM A SANITARY OR STORM SEWER IS LESS THAN 18" AND HORIZONTAL CLEARANCE IS LESS THAN 10". K-CRETE IS A PREFERRED ENCASEMENT MATERIAL FOR WESTCHESTER JOINT WATERWORKS TO USE WHICH HAS BEEN AN ACCEPTED AND APPROVED ENCASEMENT MATERIAL BY THE WESTCHESTER COUNTY DEPARTMENT OF HEALTH. K-CRETE IS AN ADVISABLE USE FOR ENCASEMENT, AS WELL AS FOR FUTURE REPAIRS. (SEE ENCASEMENT DETAIL).
- CONTRACTOR SHALL NOT PLACE ANY JOINTS WITHIN 5' OF ANY STORM OR SANITARY CROSSING.

GENERAL NOTES FOR SEWER/WATER MAIN EXTENSIONS

- ALL WATER MAINS SHALL BE PRESSURE TESTED IN ACCORDANCE WITH AWWA C600 SECTION 4 HYDROSTATIC TESTING, LATEST REVISION.
- ALL WATER MAINS SHALL BE DISINFECTED IN ACCORDANCE WITH AWWA C651 LATEST REVISION EXCEPT SECTION 4.4.2 "THE TABLET METHOD".
- THE WATER MAINS & SANITARY SEWER MAINS SHALL NOT BE PLACED INTO SERVICE UNTIL A CERTIFICATE OF CONSTRUCTION COMPLIANCE HAS BEEN SUBMITTED TO AND ACCEPTED BY THE WESTCHESTER COUNTY DEPARTMENT OF HEALTH.
- THE WCDH AND THE TOWN/VILLAGE ENGINEER MUST BE NOTIFIED 48 HOURS PRIOR TO PRESSURE TESTING THE SEWER AND WATER MAIN IMPROVEMENTS.
- ALTERATIONS BY ANY PERSON IN ANY WAY, OF ANY ITEM CONTAINED ON THIS DOCUMENT, UNLESS ACTING UNDER DIRECTION OF THE LICENSED ENGINEER WHOSE PROFESSIONAL SEAL IS AFFIXED HERETO, IS A VIOLATION OF TITLE VIII, ARTICLE 145 SECTION 7209.2 OF THE NEW YORK STATE EDUCATION LAW.
- ONLY DETAILS RELEVANT TO THE SPECIFIC PUBLIC WATER SUPPLY IMPROVEMENTS SHOWN ON THIS PLAN ARE APPLICABLE.
- ALL WATER MAIN INSTALLATIONS AND TRENCHING PROCEDURES SHALL BE IN ACCORDANCE WITH WESTCHESTER JOINT WATER WORKS DETAILS AND SPECIFICATIONS FOR WATER MAIN REPLACEMENT AND INSTALLATION.
- ANY DEVIATIONS FROM THE 10' HORIZONTAL/18" VERTICAL SEPARATIONS BETWEEN THE WATERMAIN AND SEWERS MUST BE APPROVED BY WCDH BEFORE CONSTRUCTION PROCEEDS.
- K-CRETE SHALL HAVE A MINIMUM STRENGTH OF 50 P.S.I..
- ALL WATER AND SEWER CROSSINGS SHALL BE SEPARATED BY 10 FT HORIZONTAL AND A MINIMUM OF 18" VERTICAL. WHERE THIS CANNOT BE ACCOMPLISHED THE WATERMAIN SHALL BE ENCASED WITH K-CRETE AS SHOWN ON THE DETAILS PROVIDED. WCDH APPROVAL IS REQUIRED IF DEVIATION FROM PLAN.
- SANITARY SEWER SHALL BE CONSTRUCTED OF DUCTILE IRON (DIP) SEWER PIPE AND FITTINGS, CL-52 AS PER ASTM SPECIFICATIONS AND REGULATIONS (AWWA C-151) AND FITTINGS (AWWA C-111). PUSH-ON TYPE JOINTS SHALL BE USED FOR ALL PIPE JOINTS.



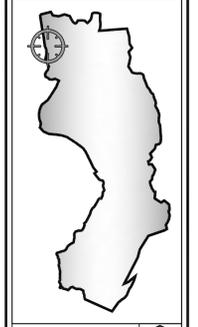
Know what's below.
Call before you dig.



UTILITY PLAN
SCALE: 1" = 50'

SCALE	1" = 50'
DATE	MAY 10, 2011
PROJECT No.	11-27
M/JA	FB
DESIGNED BY	MJA
CHECKED BY	FB

TOWN AND VILLAGE OF HARRISON
ENGINEERING DEPARTMENT
ALFRED F. SULLA, JR. MUNICIPAL BUILDING
1 HERMAN PLACE
HARRISON, NEW YORK 10528
TEL: (914) 670-3072 FAX: (914) 836-9064

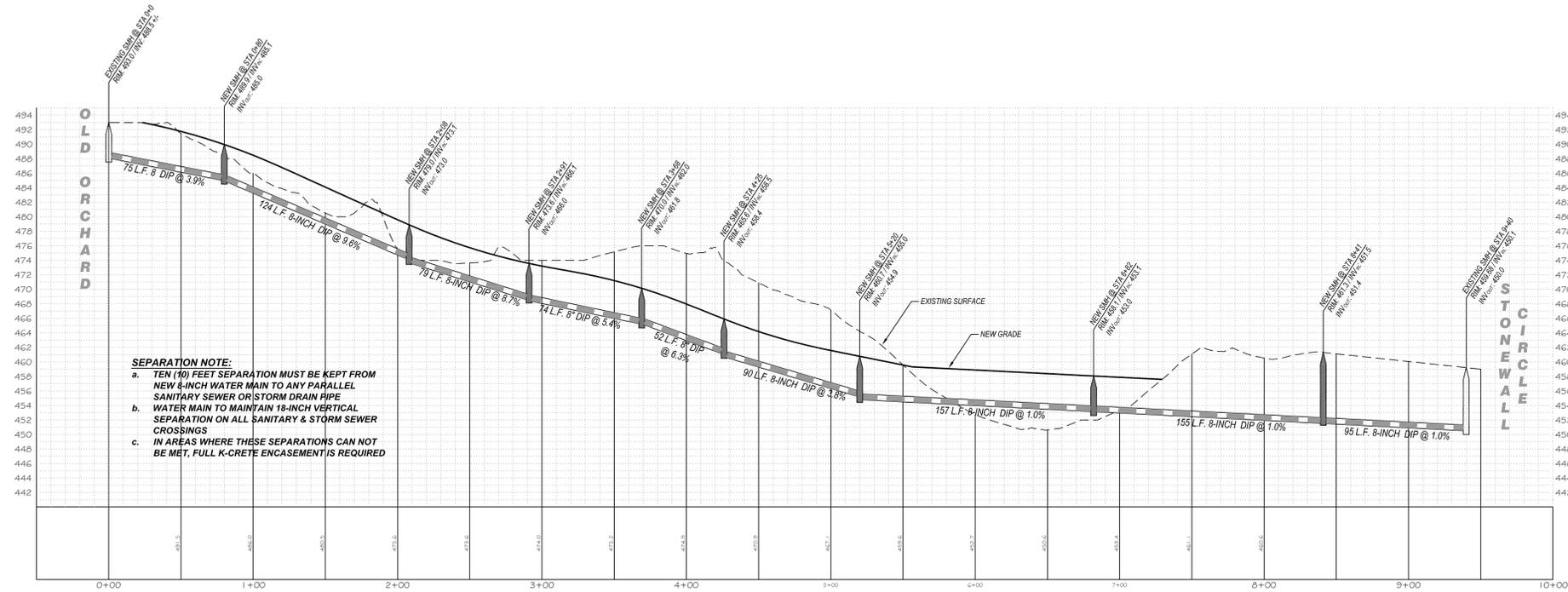


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UTILITY PLAN
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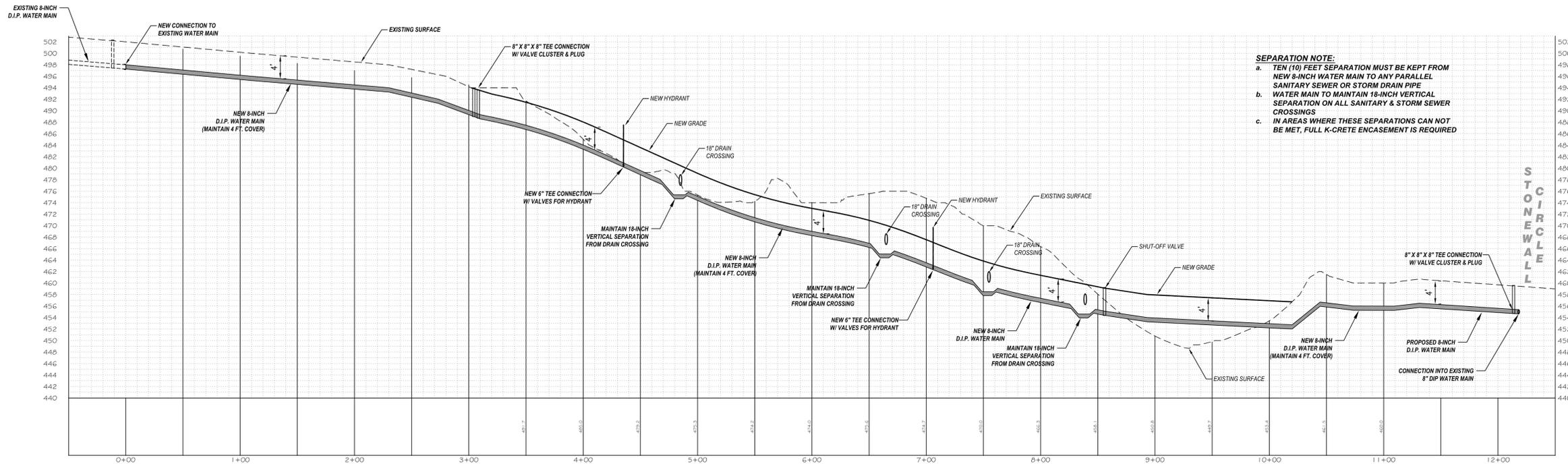
SHEET NUMBER
8 OF 14



PROPOSED SANITARY SEWER MAIN PROFILE

SCALE: 1" = 50' HORIZONTAL / 1" = 10' VERTICAL

SEPARATION NOTE:
 a. TEN (10) FEET SEPARATION MUST BE KEPT FROM NEW 8-INCH WATER MAIN TO ANY PARALLEL SANITARY SEWER OR STORM DRAIN PIPE
 b. WATER MAIN TO MAINTAIN 18-INCH VERTICAL SEPARATION ON ALL SANITARY & STORM SEWER CROSSINGS
 c. IN AREAS WHERE THESE SEPARATIONS CAN NOT BE MET, FULL K-CRETE ENCASEMENT IS REQUIRED



PROPOSED WATER MAIN PROFILE

SCALE: 1" = 50' HORIZONTAL / 1" = 10' VERTICAL

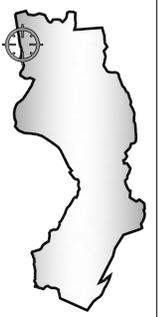
SEPARATION NOTE:
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 c. IN AREAS WHERE THESE SEPARATIONS CAN NOT BE MET, FULL K-CRETE ENCASEMENT IS REQUIRED

PROPOSED WATER MAIN / TEMPORARY WATER SERVICE AND ALL APPURTENANCES APPROVED BY THE WESTCHESTER JOINT WATER WORKS:

DATE: _____ BY: Mr. Anthony Conetta, P.E.
 WJWW MANAGER

REVISIONS	SCALE	DATE	PROJECT NO.	DESIGNED BY	CHECKED BY
	1" = 50'	MAY 10, 2011	11-27	MJA	MJA

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VICINITY MAP

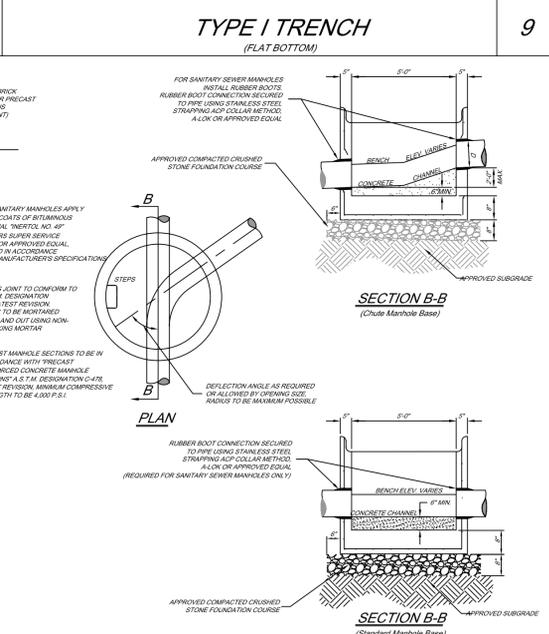
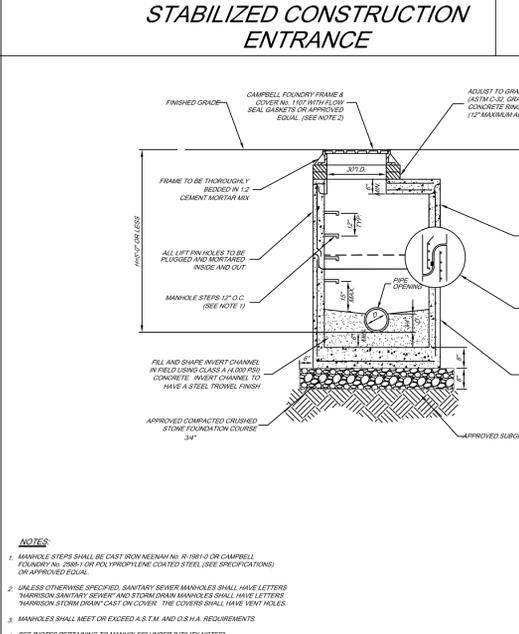
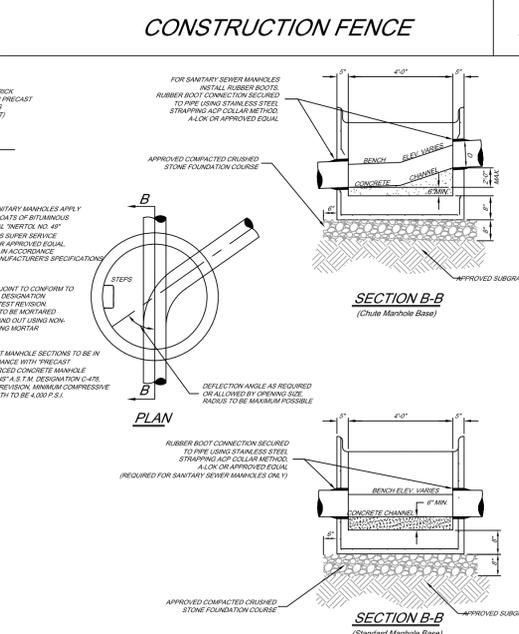
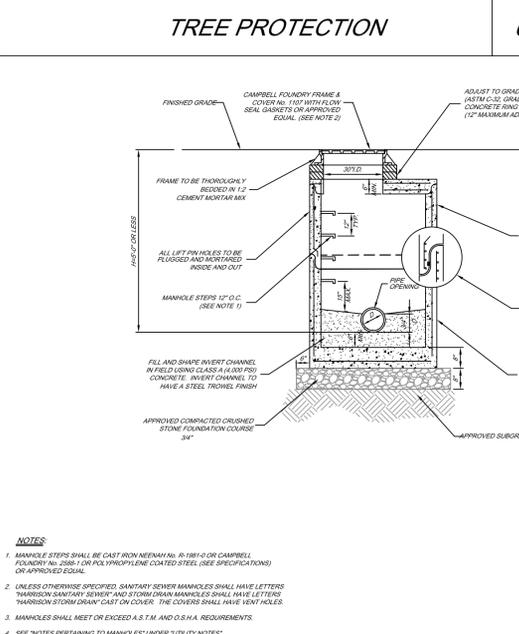
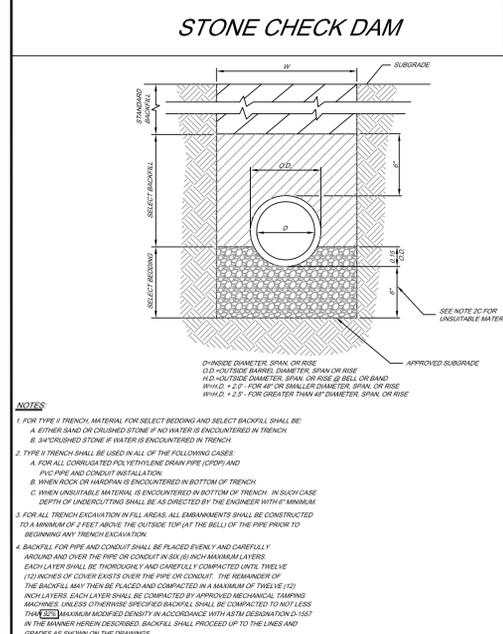
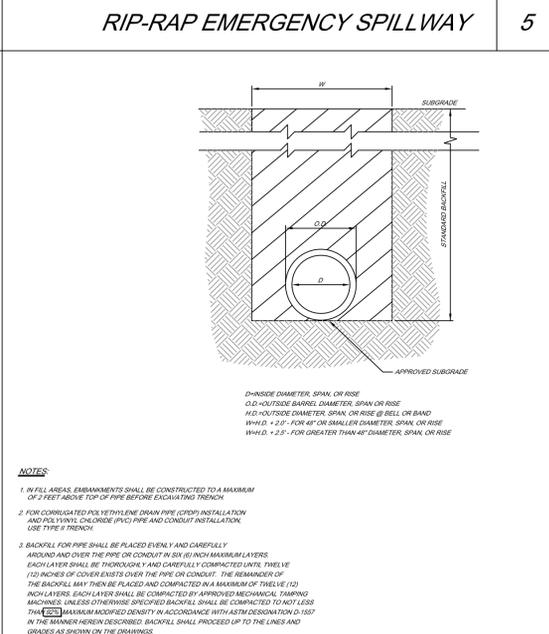
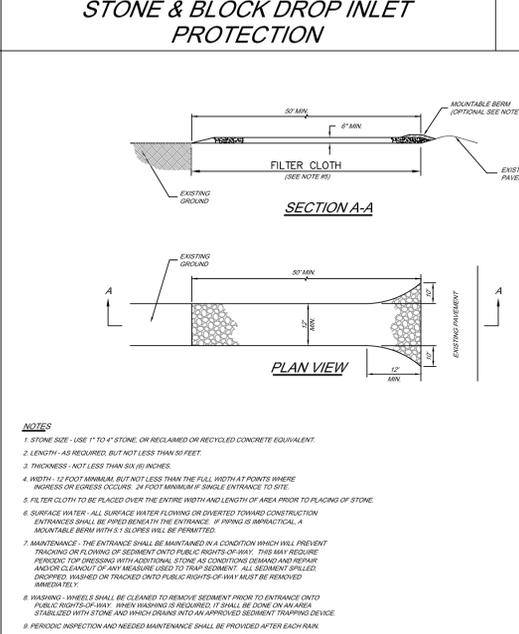
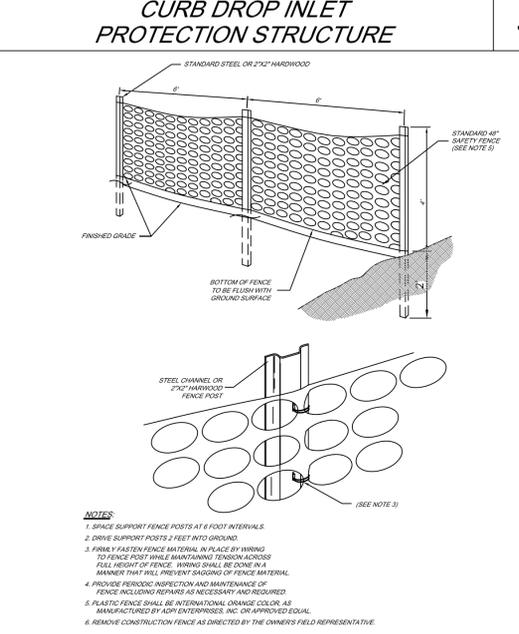
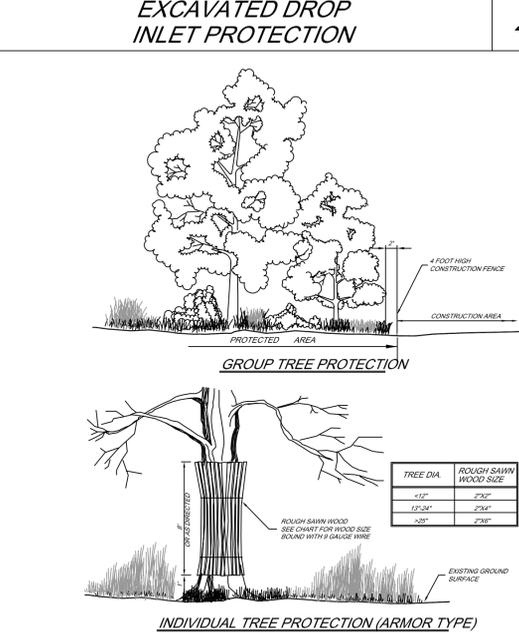
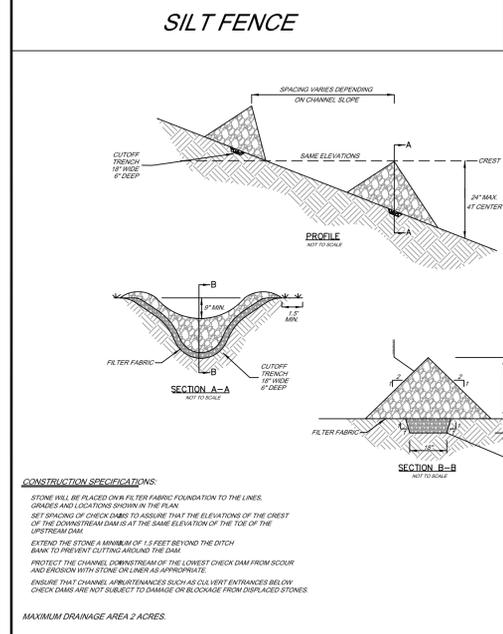
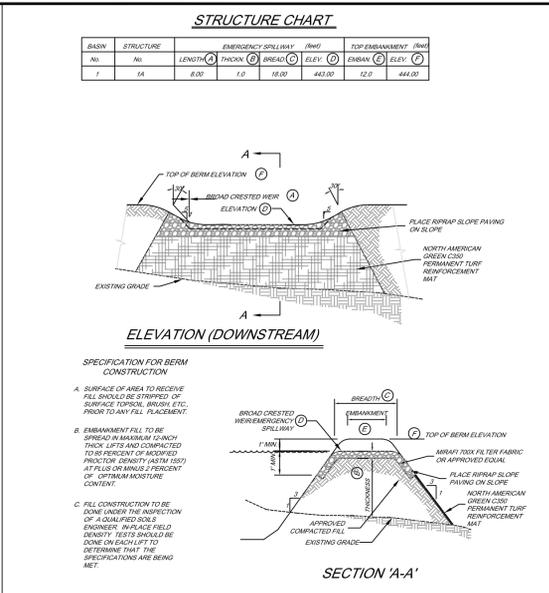
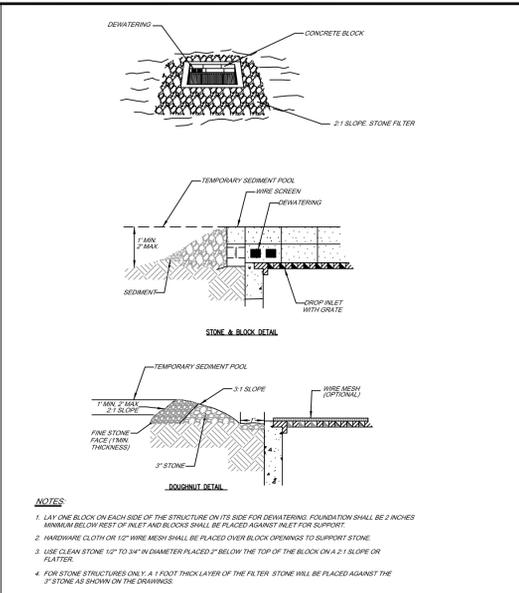
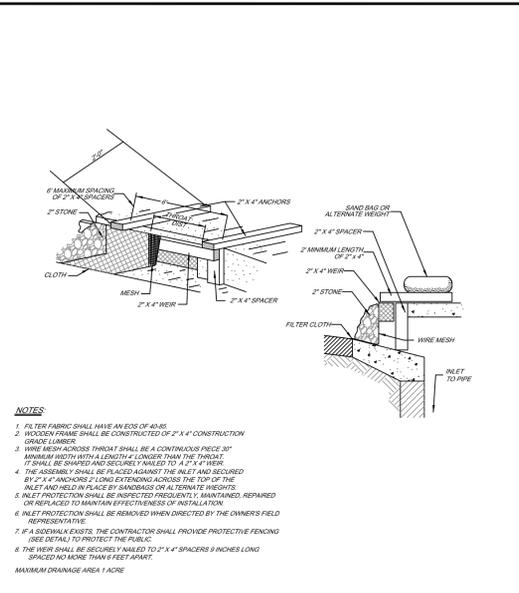
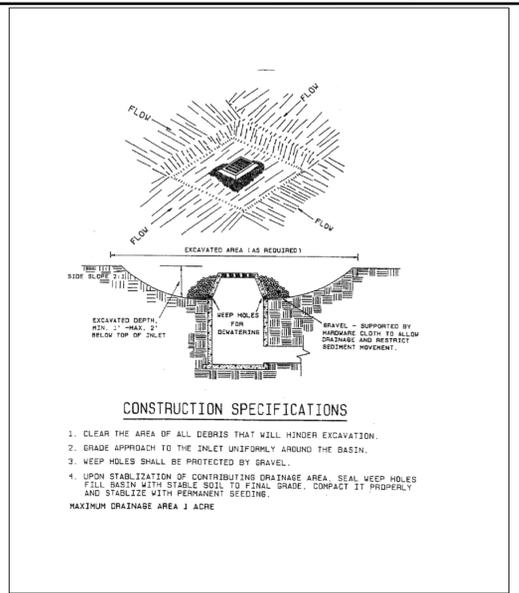
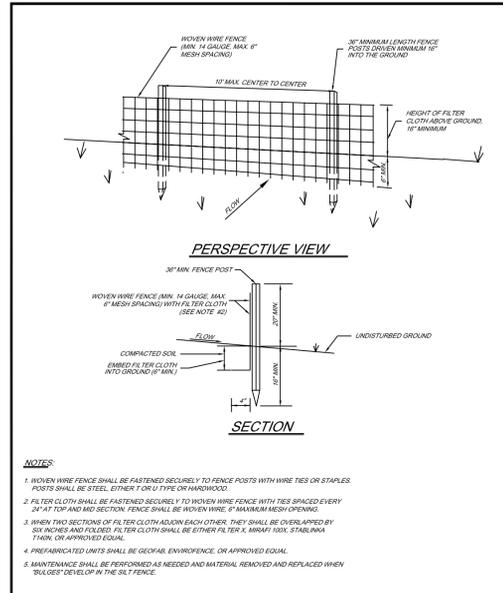


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ROADWAY & UTILITY PROFILES
 FOR
JASPER ESTATES
 A.K.A.
 OLD ORCHARD STREET SUBDIVISION
 WESTCHESTER COUNTY, N.Y.
 TOWN/VILLAGE OF HARRISON

SHEET NUMBER

10 OF 14



TOWN AND VILLAGE OF HARRISON
ENGINEERING DEPARTMENT
 ALFRED F. SULLA, JR., MUNICIPAL BUILDING
 1 HEIMAN PLACE
 HARRISON, NEW YORK 10528
 TEL: (914) 676-3072 FAX: (914) 835-9064

REVISIONS

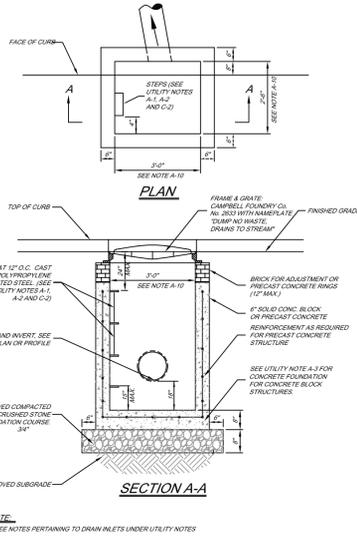
NO.	DATE	BY	DESCRIPTION
1	MAY 10, 2017	A.T.S.	

SCALE: N.T.S.
 PROJECT NO.: 17-57
 DRAWN BY: M.A.
 CHECKED BY: F.B.
 DATE: MAY 10, 2017

VICINITY MAP

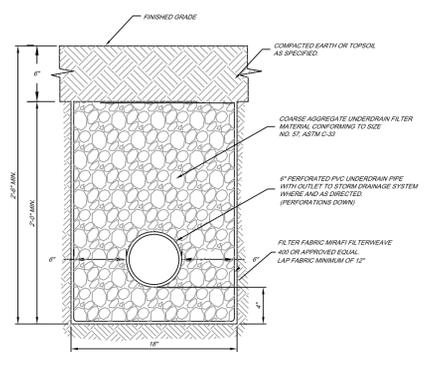
DETAILS FOR JASPER ESTATES A.K.A. OLD ORCHARD STREET SUBDIVISION WEST CHESTER COUNTY, N.Y.

SHEET NUMBER 11 OF 14



DRAIN INLET (TYPE A)
(with sump-in or sump-out underdrains)

13



PIPE UNDERDRAIN

15

UTILITY NOTES

- UNLESS OTHERWISE SPECIFIED, PIPE FOR STORM DRAINS SHALL BE ASPHALT COATED CORRUGATED STEEL PIPE - HELICAL (ACSP-H) WITH GALVANIZED CORRUGATED OR HUGGER TYPE COUPLING BANDS IN ACCORDANCE WITH AASHTO M-36 AND M-190.
- UNLESS OTHERWISE SPECIFIED, PIPE FOR STORM DRAINS SHALL BE REINFORCED CONCRETE PIPE (RCP), CLASS II, WITH ELASTOMERIC GASKET JOINTS IN ACCORDANCE WITH ASTM C-76 AND C-443.
- UNLESS OTHERWISE SPECIFIED, PIPE FOR STORM DRAINS SHALL BE SMOOTH WALL HIGH DENSITY POLYETHYLENE PIPE (HDPE) WITH CORRUGATED POLYETHYLENE COUPLING BANDS IN ACCORDANCE WITH AASHTO M-294.
- UNLESS OTHERWISE SPECIFIED, PIPE FOR SANITARY SEWER GRAVITY LINES SHALL BE POLYVINYL CHLORIDE PIPE (PVC), SDR-26, 180 PSI, WITH PUSH-ON JOINTS IN ACCORDANCE WITH ASTM D-3034 AND D-3212.
- UNLESS OTHERWISE SPECIFIED, PIPE FOR SANITARY SEWER GRAVITY LINES SHALL BE DUCTILE IRON PIPE (DIP), CLASS 50, WITH PUSH-ON JOINTS IN ACCORDANCE WITH AWWA C-150, C-151 AND C-111.
- UNLESS OTHERWISE SPECIFIED, PIPE FOR SANITARY SEWER FORCE MAINS SHALL BE POLYVINYL CHLORIDE PRESSURE PIPE (PVCPP), SDR-26, 180 PSI, WITH PUSH-ON JOINTS IN ACCORDANCE WITH ASTM D-2241.
- UNLESS OTHERWISE SPECIFIED, PIPE FOR SANITARY SEWER FORCE MAINS SHALL BE DUCTILE IRON PIPE (DIP), CLASS 50, WITH PUSH-ON JOINTS IN ACCORDANCE WITH AWWA C-150, C-151 AND C-111.
- UNLESS OTHERWISE SPECIFIED, PIPE FOR WATER LINES SHALL BE CEMENT-LINED DUCTILE IRON PIPE (DIP), CLASS 52, WITH PUSH JOINTS IN ACCORDANCE WITH AWWA C-150, C-151, C-104 AND C-111.
- UNLESS OTHERWISE SPECIFIED, PIPE FOR WATER LINES SHALL BE POLYVINYL CHLORIDE PRESSURE PIPE (PVC), CLASS 305, WITH PUSH-ON JOINTS IN ACCORDANCE WITH AWWA C-900.
- ELECTRIC, TELEPHONE, FIRE ALARM AND CABLE TELEVISION LINES SHALL BE INSTALLED UNDERGROUND IN ACCORDANCE WITH THE REQUIREMENTS OF THE UTILITY COMPANY HAVING JURISDICTION.

UTILITY NOTES

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NOTES PERTAINING TO DRAIN INLETS

- STEPS WILL NOT BE REQUIRED IN INLETS LESS THAN FOUR (4) FEET IN DEPTH. STEPS WILL BE REQUIRED IN INLETS FOUR (4) FEET OR GREATER IN DEPTH. DEPTH FOR DRAIN INLETS SHALL BE MEASURED FROM FINISHED GRADE TO INSIDE BOTTOM OF STRUCTURE (INCLUDING SUMP AS APPLICABLE).
- WHEN STEPS ARE REQUIRED, STEPS SHALL COMPLY WITH THE SAME REQUIREMENTS OF ASTM STANDARD C-408, ARTICLE 11 ENTITLED "MANHOLE STEPS & LADDERS".
- FOR MASONRY STRUCTURES, THE FIRST COURSE OF MASONRY SHALL BE SET IN THE CONCRETE FOUNDATION BEFORE THE CONCRETE HAS SET. CONCRETE FOUNDATION SHALL BE CLASS "A" (14000 PSI) CONCRETE. THERE IS (12) INCHES THICK AND SHALL EXTEND SIX (6) INCHES BEYOND THE OUTSIDE FACE OF THE STRUCTURE.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO FINISH AND CONSTRUCT THE PROPER SIZE STRUCTURE INCLUDING THE NECESSARY OPENINGS TO ACCOMMODATE THE WORK AS SHOWN ON THE PLANS OR ORDERED BY THE ENGINEER. AT NO ADDITIONAL COST TO THE OWNER.
- ALL NECESSARY PATCHING FOR DRAIN STRUCTURES SHALL BE ACCOMPLISHED WITH NON-BRANDING CEMENT MORTAR GROUT, APPROVED EQUAL TO SRA-SET AS MANUFACTURED BY THE SRA CHEMICAL COMPANY.
- FOUNDATIONS FOR PRECAST CONCRETE STRUCTURES SHALL BE SET ON A COMPACTED LAYER OF APPROVED CRUSHED STONE HAVING A MINIMUM COMPACTED THICKNESS OF EIGHT (8) INCHES.
- ALL PIPES SHALL BE CUT FLUSH WITH THE INSIDE WALL OF THE STRUCTURE.
- PROVIDE REINFORCED CONCRETE TOP SLAB FOR OVERSIZED DRAIN INLETS WITH PROPER SIZE OPENING TO ACCOMMODATE INSTALLATION OF FRAME & GRATE.
- FOR MASONRY STRUCTURES GREATER THAN TEN (10) FEET IN DEPTH, THICKNESS OF MASONRY WALLS SHALL BE INCREASED TO TWELVE (12) INCHES.
- FOR ALL STRUCTURES GREATER THAN TEN (10) FEET IN DEPTH, STRUCTURES SHALL PROVIDE MINIMUM INSIDE DIMENSIONS OF 4 FEET X 4 FEET.

NOTES PERTAINING TO MANHOLES

- PRECAST CONCRETE MANHOLES SHALL COMPLY WITH ASTM STANDARD C-443. MANHOLE JOINTS SHALL COMPLY WITH ASTM STANDARD C-443.
- FOR PRECAST CONCRETE MANHOLES FIVE (5) FEET OR LESS IN HEIGHT, TOP COVER SECTION SHALL BE REPLACED WITH PRECAST REINFORCED CONCRETE SLAB OF MIN. THICKNESS WITH OPENING OF SUFFICIENT SIZE TO ACCOMMODATE MANHOLE CASTING.
- FOR MANHOLES 10 FEET OR MORE IN DEPTH, MANHOLE DIAMETER SHALL BE FIVE (5) FEET.
- TERMINAL MANHOLE FLOORS SHALL BE SLOPED TOWARD OUTFALL PIPE.
- INVERT CHANNELS FOR PRECAST CONCRETE MANHOLES SHALL BE CONSTRUCTED OF CONCRETE.
- NOTES A.1, A.2, A.4, A.5, A.6 & A.7 UNDER "NOTES PERTAINING TO DRAIN INLETS" ABOVE SHALL APPLY TO MANHOLES.

NOTES PERTAINING TO PRECAST CONCRETE STRUCTURES FOR STORM DRAINS, SANITARY SEWERS AND WATER LINES

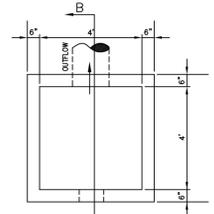
- ALL PRECAST CONCRETE STRUCTURES SHALL BE DESIGNED TO ACCOMMODATE AN H-20 DESIGN LOAD.
- STEPS SHALL BE LOCATED WITHIN STRUCTURE TO AVOID PLACEMENT OVER PIPES WHEN PRACTICABLE.

UTILITY NOTES

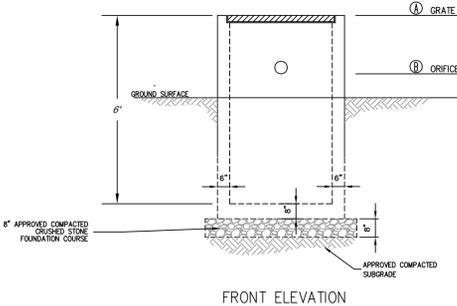
17

STRUCTURE CHART

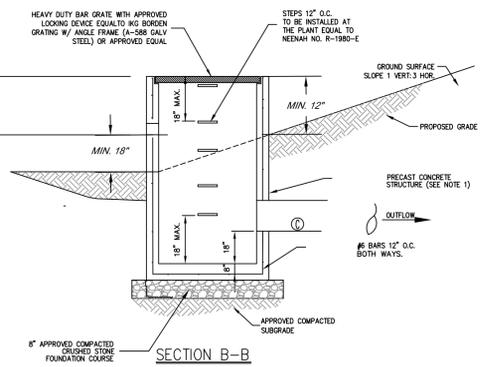
BASIN No.	STRUCTURE No.	GRATE (A) ELEV.	ORIFICE (B) DIAMETER	ORIFICE (B) ELEV.	OUTFLOW (C) DIAMETER	OUTFLOW (C) ELEV.
#	05-1	443.00	3"	442.00	18"	438.00



PLAN VIEW



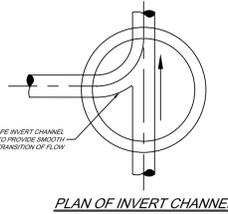
FRONT ELEVATION



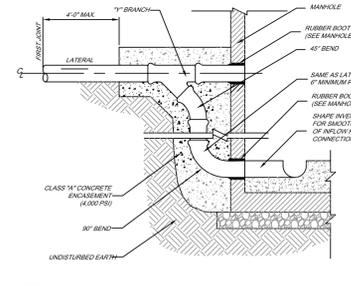
SECTION B-B

OUTLET CONTROL STRUCTURE

18



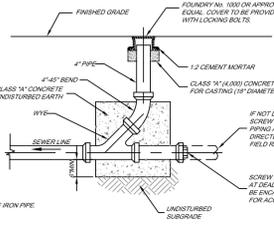
PLAN OF INVERT CHANNEL



DROP CONNECTION AT MANHOLE (SANITARY SEWER)

DROP CONNECTION AT MANHOLE (SANITARY SEWER)

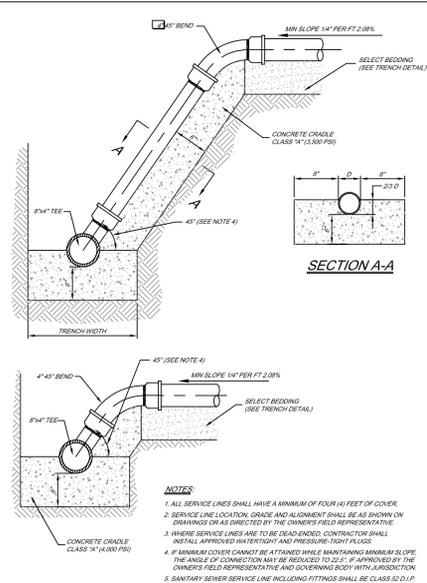
19



CLEANOUT W/O MANHOLE

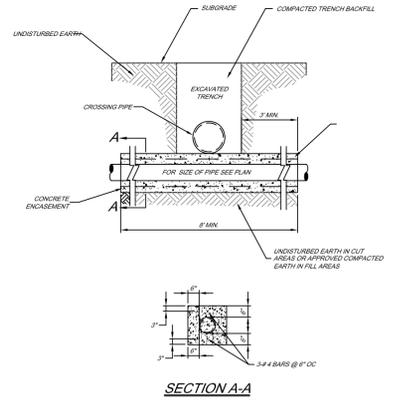
CLEANOUT W/O MANHOLE

20



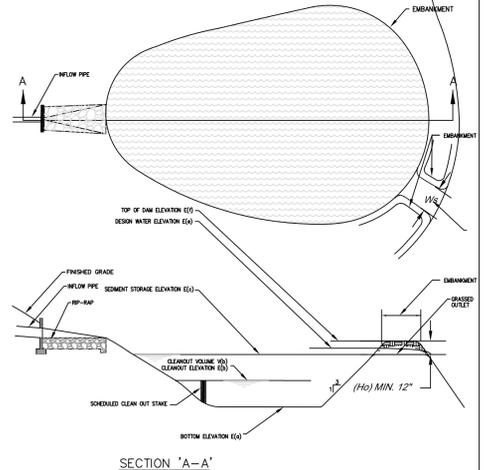
SANITARY SEWER SERVICE CONNECTION

22



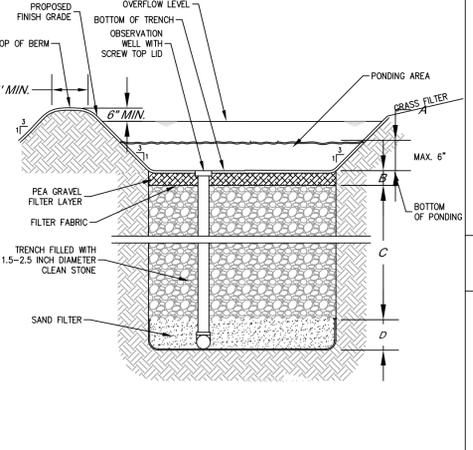
CONCRETE ENCASUREMENT

23



GRASS OUTLET SEDIMENT TRAP ST-II

24

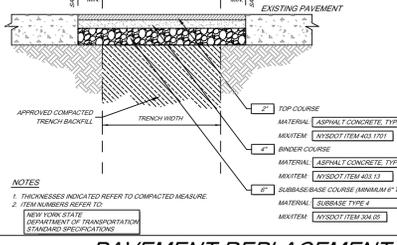


INFILTRATION BASIN DETAIL

25

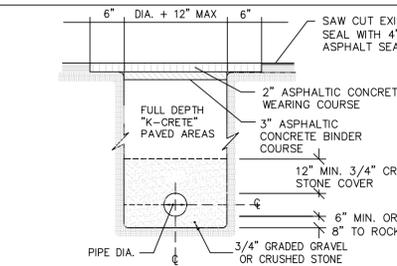
WATER VALVE BOX RESET (CASTING SET TO GRADE)

21



PAVEMENT REPLACEMENT OVER TRENCH

26

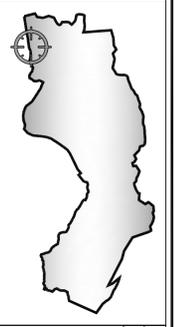
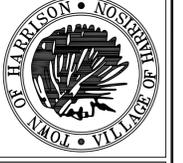


PAVEMENT RESTORATION

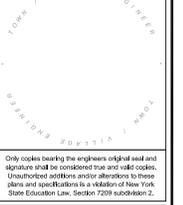
27

REVISIONS	SCALE	DATE	PROJECT NO.	M/A
	1" = 50'	MAY 10, 2011	1181M PL	FB
			11-57	FB
				CREATED BY

TOWN AND VILLAGE OF HARRISON
ENGINEERING DEPARTMENT
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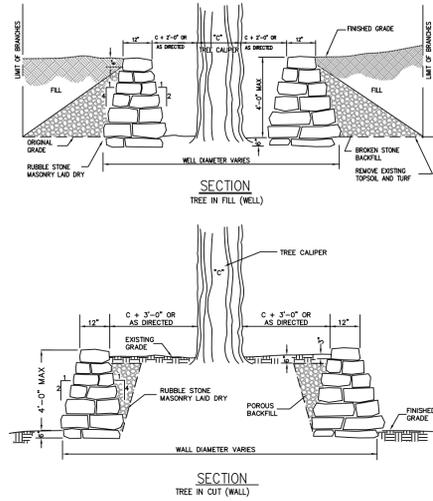
VICINITY MAP



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DETAILS FOR JASPER ESTATES
A.K.A. OLD ORCHARD STREET SUBDIVISION
TOWN/VILLAGE OF HARRISON
WESTCHESTER COUNTY, N.Y.

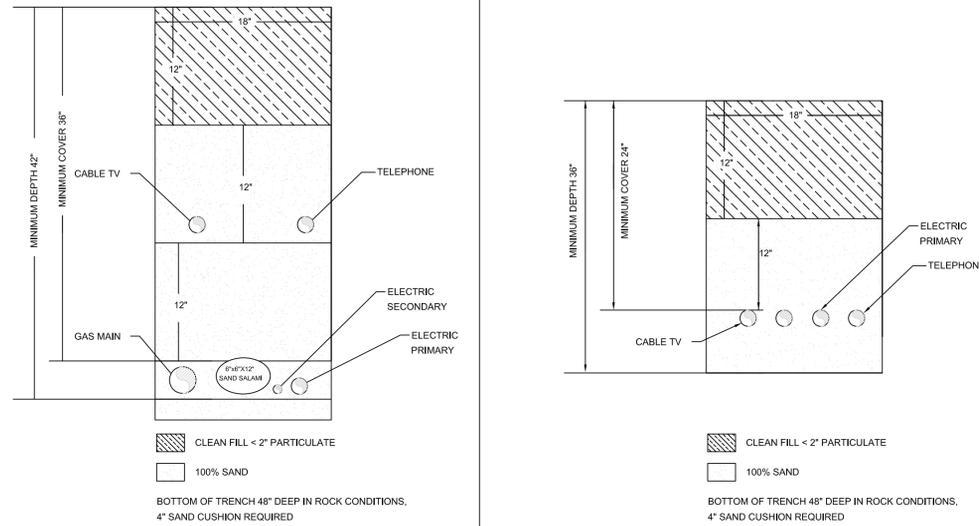
SHEET NUMBER
12 OF 14



1. THE CONTRACTOR SHALL PROTECT ALL EXPOSED AND DISTURBED ROOT STRUCTURE AS DIRECTED UNTIL THE WALLS ARE CONSTRUCTED.
2. THE CONTRACTOR MAY LAY RUBBLE STONE AVAILABLE FROM THE JOB SITE PROVIDED THE STONE MEETS THE APPROVAL OF THE OWNERS FIELD REPRESENTATIVE.

TREE WELL AND WALL

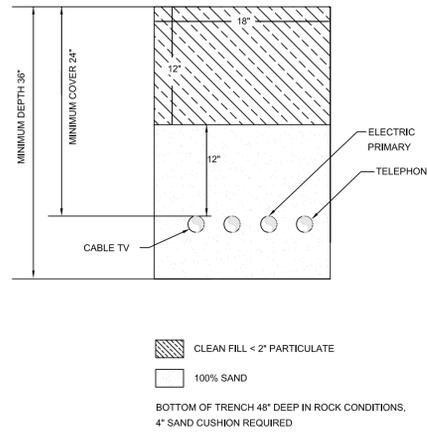
28



MINIMUM COVER 24"
MINIMUM DEPTH 36"
CLEAN FILL < 2" PARTICULATE
100% SAND
BOTTOM OF TRENCH 48" DEEP IN ROCK CONDITIONS.
4" SAND CUSHION REQUIRED

UTILITY TRENCH DETAIL (BY OTHERS)

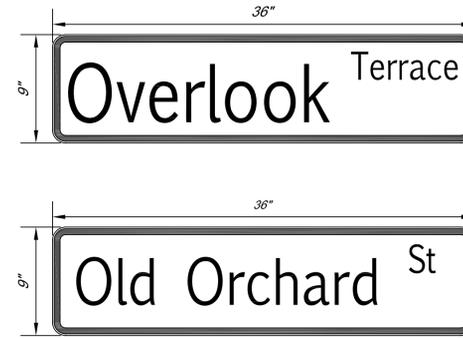
29



MINIMUM COVER 24"
MINIMUM DEPTH 36"
CLEAN FILL < 2" PARTICULATE
100% SAND
BOTTOM OF TRENCH 48" DEEP IN ROCK CONDITIONS.
4" SAND CUSHION REQUIRED

ELECTRIC/CABLE CONDUIT DETAIL

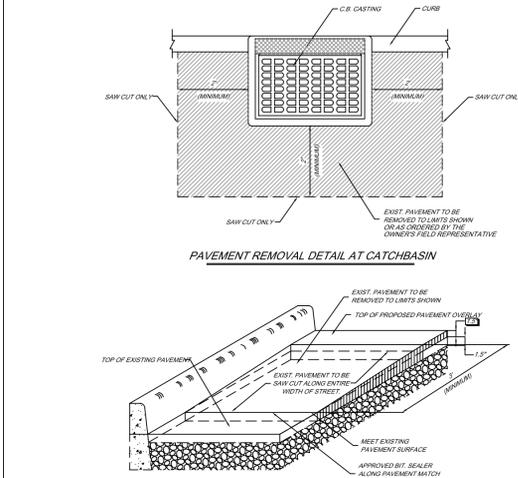
29



- NOTE:**
1. SEE CONTRACT SPECIFICATIONS FOR MATERIAL INFORMATION

STREET SIGN DETAIL

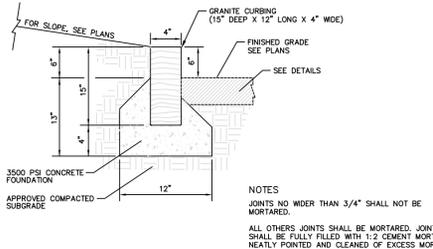
30



- NOTE:**
1. THE CONTRACTOR SHALL PROVIDE PAVEMENT KEYS AT ALL POINTS OF CONTACT WITH PAVEMENT NOT SLATED FOR RESURFACING AND AT ALL CATCHBASINS WITH CASTINGS THAT CANNOT BE RESET. KEYS SHALL BE SAW CUT AND PAVEMENT SHALL BE REMOVED IN ACCORDANCE WITH THE DIMENSIONS SHOWN ON AS ORDERED BY THE OWNERS FIELD REPRESENTATIVE

PAVEMENT KEYING

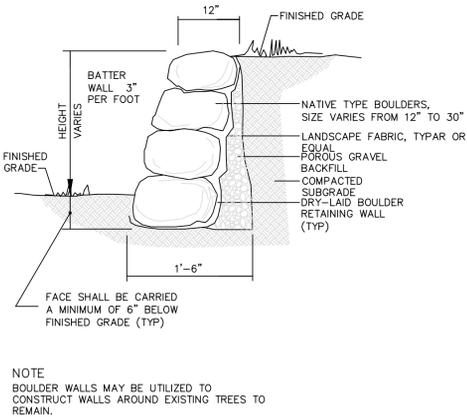
31



- NOTES:**
JOINTS NO WIDER THAN 3/4" SHALL NOT BE MORTARED.
ALL OTHERS JOINTS SHALL BE MORTARED. JOINTS SHALL BE FULLY FILLED WITH 1:2 CEMENT MORTAR, NEATLY POINTED AND CLEANED OF EXCESS MORTAR.

GRANITE CURB

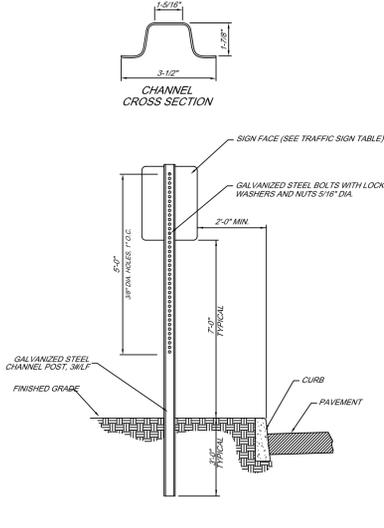
32



- NOTE:**
BOULDER WALLS MAY BE UTILIZED TO CONSTRUCT WALLS AROUND EXISTING TREES TO REMAIN.

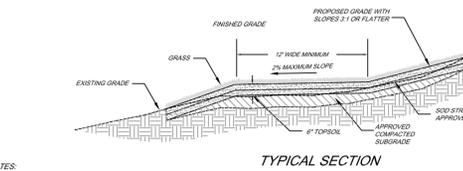
BOULDER WALL DETAIL

34



TRAFFIC SIGN POST (STEEL CHANNEL)

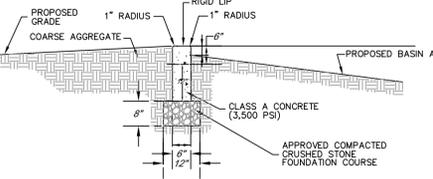
35



- NOTES:**
1. IMMEDIATELY AFTER DRAINING OPERATIONS, THE GRASS SHOULD BE PLANTED AND MAINTAINED THROUGHOUT THE LIFE OF THE PROJECT.
2. PAVEMENTS SHALL BE CONSTRUCTED TO ACCOMMODATE THE TENSILE STRENGTH OF THE GRASS COVER.
3. AREA AROUND THE ACCESS ROUTE TO THE DRAINAGE CHANNEL SHOULD BE MAINTAINED FOR PROPER DRAINAGE.

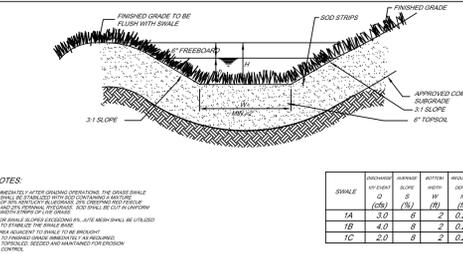
BASIN ACCESS ROUTES WITH GRASS COVER

36



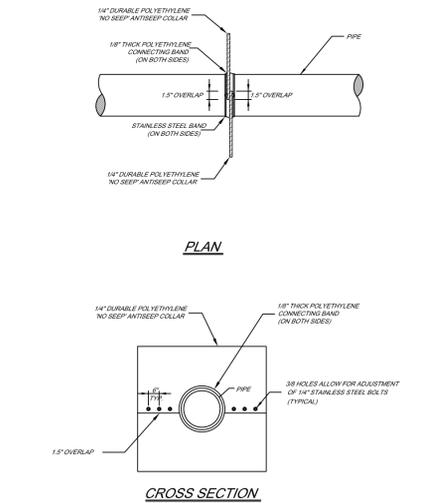
CONCRETE LEVEL SPREADER

33



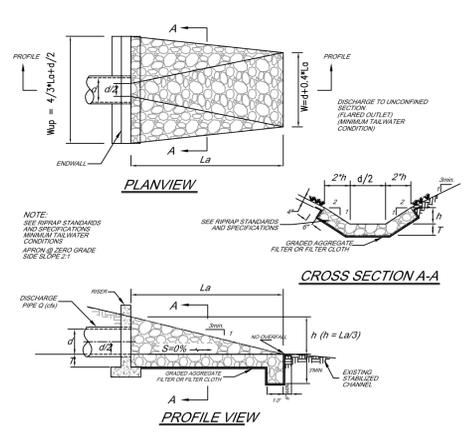
GRASS SWALE

37



ANTISEEP COLLAR

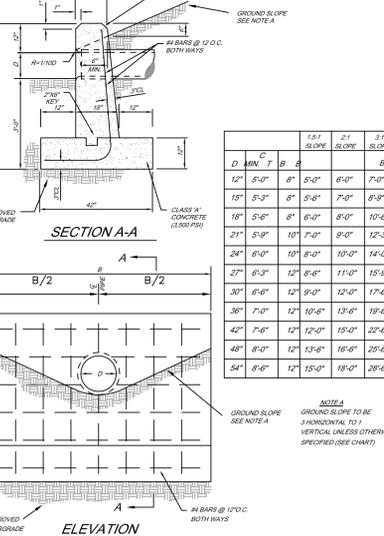
39



STRUCTURE	PIPE	RIE-RAP APRON							
RIE-RAP	LABE	DISCHARGE	DIA	LENGTH	WIDTH	WIDTH UP	THICKNESS	STONE DIA	HEIGHT
OROSPRAY	STRUCTURES	Q	d	L	W	W _{up}	T	d _{SD}	h
APRON I	HV-C	11.50	12	10	5.3	14	4	4	4
APRON II	HV-B	2.50	15	5	3.0	7	9	3	2

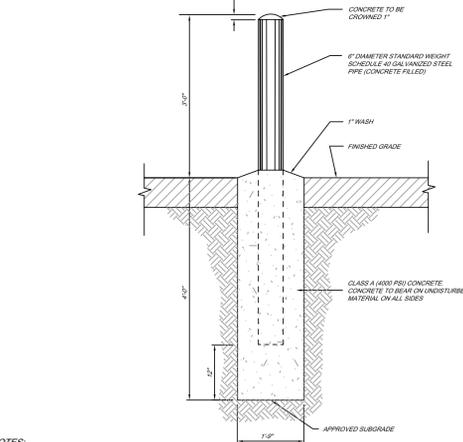
RIE-RAP APRON/ENERGY DISSIPATOR

40



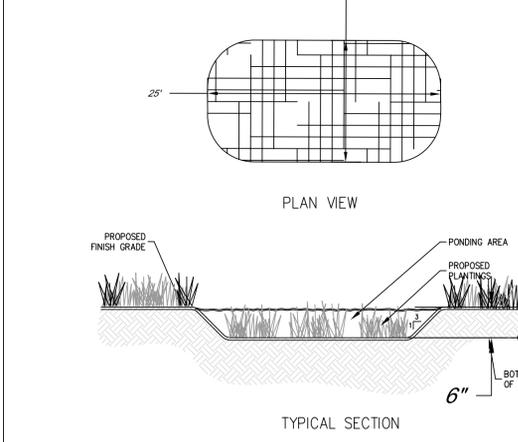
STRAIGHT CONCRETE HEADWALL

41



STEEL PIPE PROTECTION POST

42



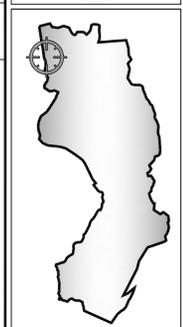
DISCONNECTED ROOFTOP PONDING AREA

43

- NOTES:**
1. AREAS DESIGNATED TO RECEIVE RUNOFF FROM ROOFTOP DISCONNECTION MUST BE PROPERLY GRADED FOR INFILTRATION AND CONVEYANCE IN A NON-EROSIVE MANNER WITHIN THE SITE BOUNDARY.
2. THE CONTRIBUTING AREA OF ROOFTOP TO EACH DISCONNECTED DISCHARGE SHALL BE UP TO 2,000 SQUARE FEET.
3. THE ENTIRE VEGETATIVE INFILTRATION/INFILTRATION AREA SHALL HAVE AN AVERAGE SLOPE OF LESS THAN FIVE PERCENT.

REVISIONS	SCALE	DATE	PROJECT No.	DESIGNED BY	CHECKED BY
	1" = 50'	MAY 10, 2011	11-57	MJA	FB
				MJA	FB

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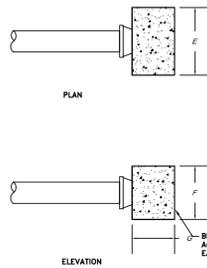


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TOWN/VILLAGE OF HARRISON

PIPE DIAM. IN.	BLOCK DIMENSIONS			CONCRETE VOLUME FT.
	E IN.	F IN.	G IN.	
6	20	16	12	2.2
8	28	20	12	3.9
10	30	24	12	5.0
12	42	30	16	10.2
16	52	42	18	22.7

- NOTES:
- 2500 psi concrete to be used.
 - Block dimensions are minimum and are based upon soil bearing pressure of 2000 psf and water pressure of 150 psi. Where soil bearing is less or water pressure is greater, a special design will be required.
 - For use on abandoned lines and dead ends where no extension is contemplated.

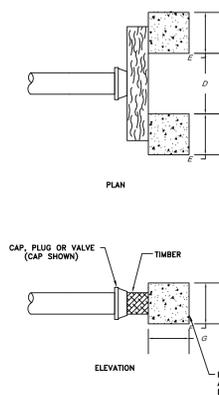


THRUST BLOCKING FOR CAPS, PLUGS AND VALVES

44

PIPE DIAM. IN.	BLOCK DIMENSIONS			CONCRETE VOLUME FT.
	E IN.	F IN.	G IN.	
4	NONE REQUIRED			
6	12	12	12	2.0
8	16	16	16	4.8
10	20	20	20	9.3
12	24	24	24	16.0
16	32	32	32	58.0

- NOTES:
- 2500 psi concrete to be used.
 - Block dimensions are minimum and are based upon soil bearing pressure of 2000 psf and water pressure of 150 psi. Where soil bearing is less or water pressure is greater, a special design will be required.
 - Timber to be Douglas Fir construction grade or better. Horizontal shear 120 psi.

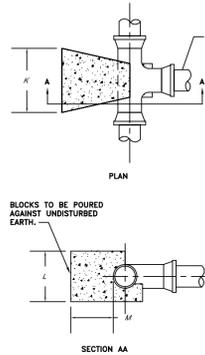


THRUST BLOCKING AT DEAD ENDS PLANNED FOR FUTURE EXTENSIONS

45

BRANCH SIZE IN.	BLOCK DIMENSIONS			CONCRETE VOLUME FT.
	K IN.	L IN.	M IN.	
6	18	18	12	2.4
8	30	18	12	4.0
10	42	20	12	6.3
12	50	24	16	11.3
16	60	36	24	30.0

- NOTES:
- 2500 psi concrete to be used.
 - Block dimensions are minimum and are based upon soil bearing pressure of 2000 psf and water pressure of 150 psi. Where soil bearing is less or water pressure is greater, a special design will be required.

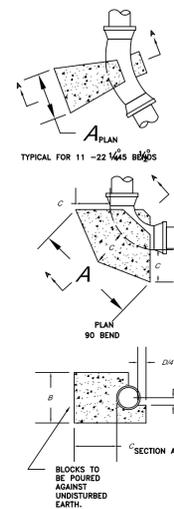


THRUST BLOCKING FOR TEES

46

PIPE DIAM. IN.	BLOCK DIMENSIONS			CONCRETE VOLUME FT.
	A IN.	B IN.	C IN.	
16	90	80	32	39.5
12	45	45	28	19.7
10	22.5	30	22	10.0
8	11.25	20	18	3.8
6	9.0	16	12	1.5
4.5	3.8	10	7.7	0.64
3	2.25	6	4.5	0.20
2.25	1.8	4.5	3.0	0.10
1.5	1.125	3.0	2.25	0.05
1.125	0.9	2.25	1.65	0.03
0.9	0.75	1.8	1.35	0.02
0.75	0.6	1.5	1.125	0.01
0.6	0.45	1.125	0.825	0.005
0.45	0.3	0.75	0.525	0.002
0.3	0.225	0.525	0.375	0.001
0.225	0.18	0.4125	0.28125	0.0005

- NOTES:
- 2500 psi concrete to be used.
 - Block dimensions are minimum and are based upon soil bearing pressure of 2000 psf and water pressure of 150 psi. Where soil bearing is less or water pressure is greater, a special design will be required.

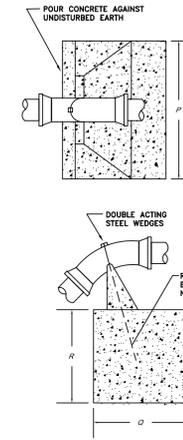


THRUST BLOCKING FOR HORIZONTAL BENDS

47

PIPE DIAM. IN.	BLOCK DIMENSIONS			CONCRETE VOLUME FT.
	P IN.	Q IN.	R IN.	
4.5	7.2	6.0	5.6	5.2
3	4.5	4.0	4.4	2.7
2.25	3.0	3.0	3.6	1.4
1.8	2.25	2.4	2.8	0.8
1.5	1.8	2.0	2.4	0.64
1.125	1.35	1.5	1.8	0.27
0.9	1.125	1.2	1.5	0.135
0.75	0.9	1.0	1.2	0.08
0.6	0.75	0.8	1.0	0.04
0.45	0.525	0.6	0.75	0.02
0.3	0.375	0.45	0.525	0.008
0.225	0.28125	0.3375	0.4125	0.003
0.18	0.225	0.28125	0.3375	0.001

- NOTES:
- 2500 psi concrete to be used.
 - Block dimensions are minimum and are based upon soil bearing pressure of 2000 psf and water pressure of 150 psi. Where soil bearing is less or water pressure is greater, a special design will be required.
 - Where 90 degree vertical bend is required approval must first be obtained from the Engineer. A special design will be required.
 - 2 #6 reinforcing rods required for 15" 45 degree bends; 1 #8 reinforcing rod required for all other bends. Exposed bars to be provided with protective coating.

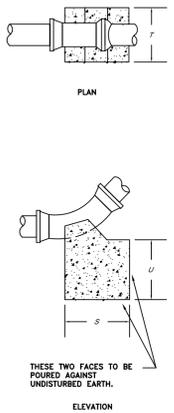


ANCHORAGE FOR CREST VERTICAL BENDS

48

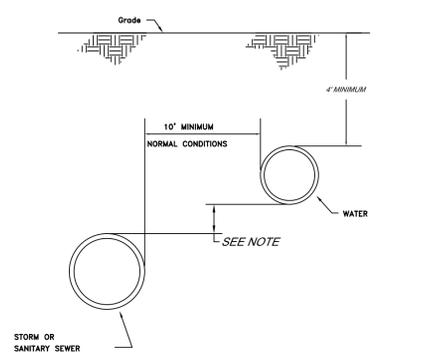
PIPE DIAM. IN.	BLOCK DIMENSIONS			CONCRETE VOLUME FT.
	S IN.	T IN.	U IN.	
16	90	48	48	64.0
12	45	24	24	18.8
10	22.5	12	12	9.3
8	11.25	6	6	2.7
6	9.0	4.5	4.5	1.5
4.5	4.5	2.25	2.25	0.6
3	3	1.5	1.5	0.3
2.25	2.25	1.125	1.125	0.15
1.8	1.8	0.825	0.825	0.08
1.5	1.5	0.675	0.675	0.04
1.125	1.125	0.525	0.525	0.02
0.9	0.9	0.4125	0.4125	0.01
0.75	0.75	0.3125	0.3125	0.005
0.6	0.6	0.225	0.225	0.002
0.45	0.45	0.16875	0.16875	0.001
0.3	0.3	0.125	0.125	0.0005
0.225	0.225	0.09375	0.09375	0.0002

- NOTES:
- 2500 psi concrete to be used.
 - Block dimensions are minimum and are based upon soil bearing pressure of 2000 psf and water pressure of 150 psi. Where soil bearing is less or water pressure is greater, a special design will be required.
 - Bend to be set against undisturbed earth, backfill to be firmly tamped, or block to be furnished as directed by the Engineer.



THRUST BLOCKING FOR SAG VERTICAL BENDS

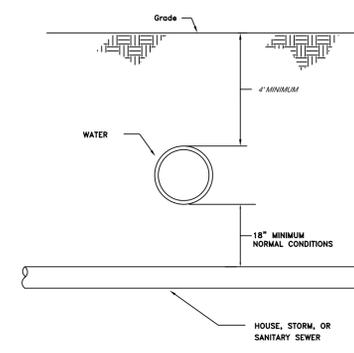
49



NOTE: WHERE A 10' MINIMUM HORIZONTAL SEPARATION CANNOT BE OBTAINED DUE TO FIELD CONDITIONS, THE VERTICAL CLEAR DISTANCE SHALL BE A MINIMUM OF 18". HOWEVER, AN EXCEPTION TO THE 10' MINIMUM HORIZONTAL SEPARATION REQUIRES SEPARATE APPROVAL OF THE WESTCHESTER COUNTY HEALTH DEPARTMENT.

SEPERATION OF WATER MAIN AND SEWER - PARALLEL INSTALLATION

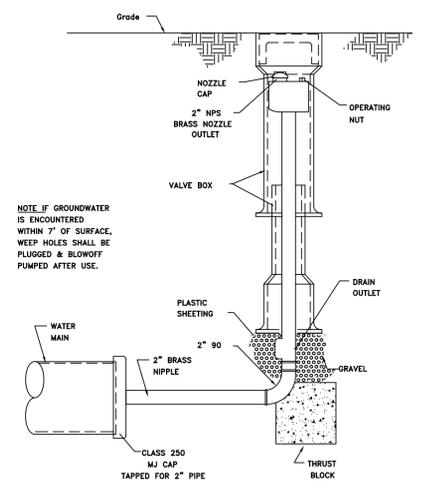
50



UNUSUAL CONDITIONS: WATER MAINS PASSING UNDER SEWERS SHALL HAVE A VERTICAL CLEARANCE OF 18" MINIMUM BETWEEN THE SEWER AND WATER MAIN, AND THE SEWER SHALL BE SUPPORTED AS DIRECTED BY THE ENGINEER. TO THE EXTENT FEASIBLE, JOINTS IN THE WATER MAIN SHALL BE KEPT AS FAR AS POSSIBLE FROM THE SEWER. WHERE AN 18" SEPARATION CANNOT BE OBTAINED DUE TO FIELD CONDITIONS, SEPARATE APPROVAL OF THE WESTCHESTER COUNTY HEALTH DEPARTMENT SHALL BE REQUIRED.

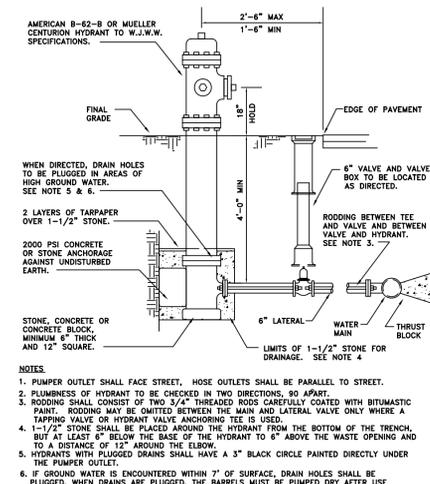
SEPARATION OF WATER MAIN AND SEWER CROSSING

51



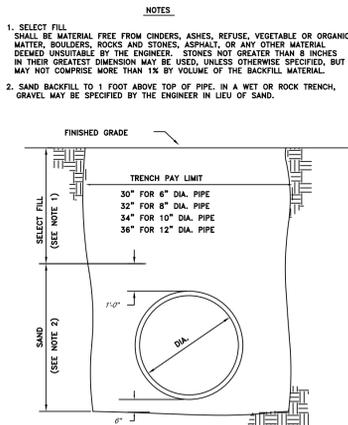
2" BLOWOFF

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HYDRANT DETAIL

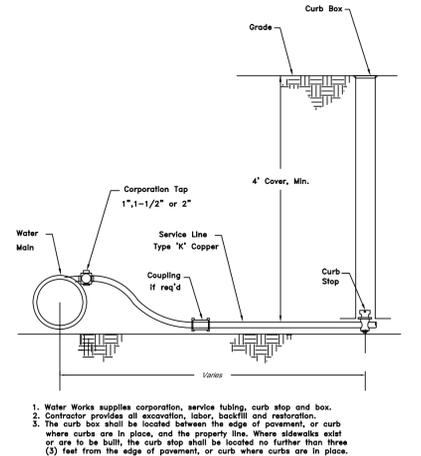
53



- NOTES:
- SELECT FILL SHALL BE MATERIAL FREE FROM CINDERS, ASHES, REFUSE, VEGETABLE OR ORGANIC MATTER, BOULDERS, ROCKS AND STONES, ASPHALT, OR ANY OTHER MATERIAL DEEMED UNSUITABLE BY THE ENGINEER. STONES NOT GREATER THAN 8 INCHES IN THEIR GREATEST DIMENSION MAY BE USED, UNLESS OTHERWISE SPECIFIED, BUT MAY NOT COMPRISE MORE THAN 1% BY VOLUME OF THE BACKFILL MATERIAL.
 - SAND BACKFILL TO 1 FOOT ABOVE TOP OF PIPE. IN A WET OR ROCK TRENCH, GRAVEL MAY BE SPECIFIED BY THE ENGINEER IN LIEU OF SAND.

TRENCH PAYMENT LIMITS

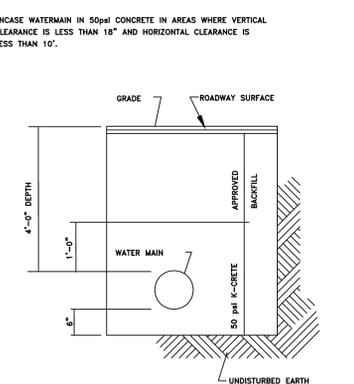
54



1. Water Works supplies corporation, service tubing, curb stop and box.
2. Contractor provides all excavation, labor, backfill and restoration.
3. The curb stop shall be located between the edge of pavement, or curb where curbs are in place, and the property line. Where sidewalks exist or are to be built, the curb stop shall be located no further than three (3) feet from the edge of pavement, or curb where curbs are in place.

WATER SERVICE LINES

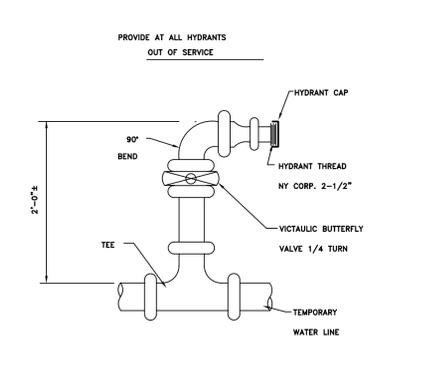
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- ENCASE WATERMAIN IN 50psi CONCRETE IN AREAS WHERE VERTICAL CLEARANCE IS LESS THAN 18" AND HORIZONTAL CLEARANCE IS LESS THAN 10".

ENCASEMENT DETAIL

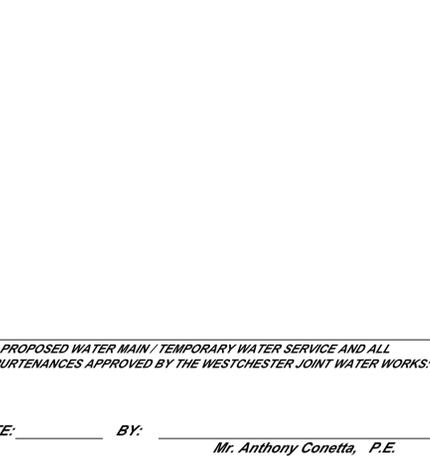
56



- PROVIDE AT ALL HYDRANTS OUT OF SERVICE.

TEMPORARY HYDRANT

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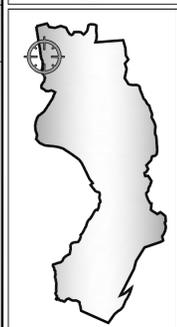


DATE: _____ BY: _____
Mr. Anthony Conetta, P.E.
WJWW MANAGER

PROPOSED WATER MAIN / TEMPORARY WATER SERVICE AND ALL APPURTENANCES APPROVED BY THE WESTCHESTER JOINT WATER WORKS:

REVISIONS	DATE	BY	CHKD BY
1	MAY 10, 2011		

SCALE: 1" = 50'
DATE: MAY 10, 2011
PROJECT NO. 11-57
TOWN AND VILLAGE OF HARRISON
ENGINEERING DEPARTMENT
ALFRED F. SULLA, JR., MUNICIPAL BUILDING
1 HERMAN PLACE
HARRISON, NEW YORK 10528
TEL: (914) 670-3072 FAX: (914) 835-9864



Only copies bearing the engineer's original seal and signature shall be considered true and valid copies. Unauthorised additions and/or alterations to these plans and specifications is a violation of New York State Education Law, Section 2209 and section 2210.

WJWW DETAILS FOR JASPER ESTATES A.K.A. OLD ORCHARD STREET SUBDIVISION TOWN/VILLAGE OF HARRISON WESTCHESTER COUNTY, N.Y.

DATE: _____ BY: _____
Mr. Anthony Conetta, P.E.
WJWW MANAGER

SHEET NUMBER 14 OF 14