

March 12, 2014

Mr. Richard Keener, P.E.
Moody Nolan
4415 Euclid Avenue – Suite 100
Cleveland, Ohio 44103

***Re: Cleveland School of the Arts – Cleveland, Ohio
Stormwater Management and Connection Approval***

The Northeast Ohio Regional Sewer District (NEORSRD) is in receipt of plans submitted by Moody Nolan for the referenced project. The project includes the proposed redevelopment of a school building and surrounding walks and pavement with a drainage area of approximately 7.75 acres, located along Stearns Road north of Carnegie Avenue and south of Deering Avenue in the City of Cleveland. The site is tributary to CSO-224.

Stormwater Management

Under the proposed stormwater management plan, a portion of the site drains to the 20-inch combined sewer that crosses the site along the vacated alignment of E. 109th Street and is owned by the City of Cleveland and a portion drains to the NEORSRD's No. 5 brick Doan Valley Interceptor (DVI). While the project does not change the sewershed of CSO-224, the proposed configuration preserves opportunities for removing a significant portion of the site's stormwater runoff from the combined sewer system during the anticipated future phase of development. The NEORSRD would like to explore these possibilities as plans emerge.

The proposed stormwater management design for the site must meet the current NEORSRD Title IV Combined Sewer Code requirements, detailed in the previously-provided guidance document, ***Submittal Requirements for Connections to the Combined Sewer System – Guidelines for Review and Approval***.

We appreciate your cooperation and the District has no objection to the stormwater management plan for this project.

Sewer Connections

The NEORSRD hereby authorizes the connection to the DVI provided the following conditions are met:

- The contractor shall provide pre-construction and post-construction video inspection of the existing sewer showing footage measurement from either the upstream or the downstream manhole and extending a minimum of twenty feet past the connection points. The former shall be submitted to the NEORSRD for approval.

- The connection shall be made through a properly sized cored hole. If the connection is to a reinforced concrete or vitrified clay pipe then the lateral shall be connected to the sewer using a manufactured boot that makes a watertight connection. If the connection is to a brick sewer then the lateral shall be connected by wrapping a waterstop material such as a Volclay RX101 or equal around the lateral, 2 wraps minimum in accordance with the attached detail. If waterstop material is used, the annular space between the sewer wall and the lateral shall be filled with hydraulic cement. Either type of connection shall then be encased in concrete.
- The contractor shall provide a watertight connection to the existing lateral and encase the connection in concrete.
- The owner shall warrant that the connection will be watertight for a period of one year.
- The contractor is responsible for any and all damage to the sewer as determined by the NEORSD.
- The contractor shall prevent any debris from entering the sewer. Any debris entering the sewer shall be removed by the contractor.
- The contractor is responsible for obtaining any and all permits required for the work.
- The Engineer shall provide an “as-built” drawing of the connection upon on completion of the work.
- A 72-hour notice shall be provided to Sewer System Maintenance and Operation (SSMO) – Infrastructure Support at 216-641-6000, ext. 2326, to schedule an NEORSD inspector for the connection.

If you have any questions, please feel free to contact me at ext. 6466.

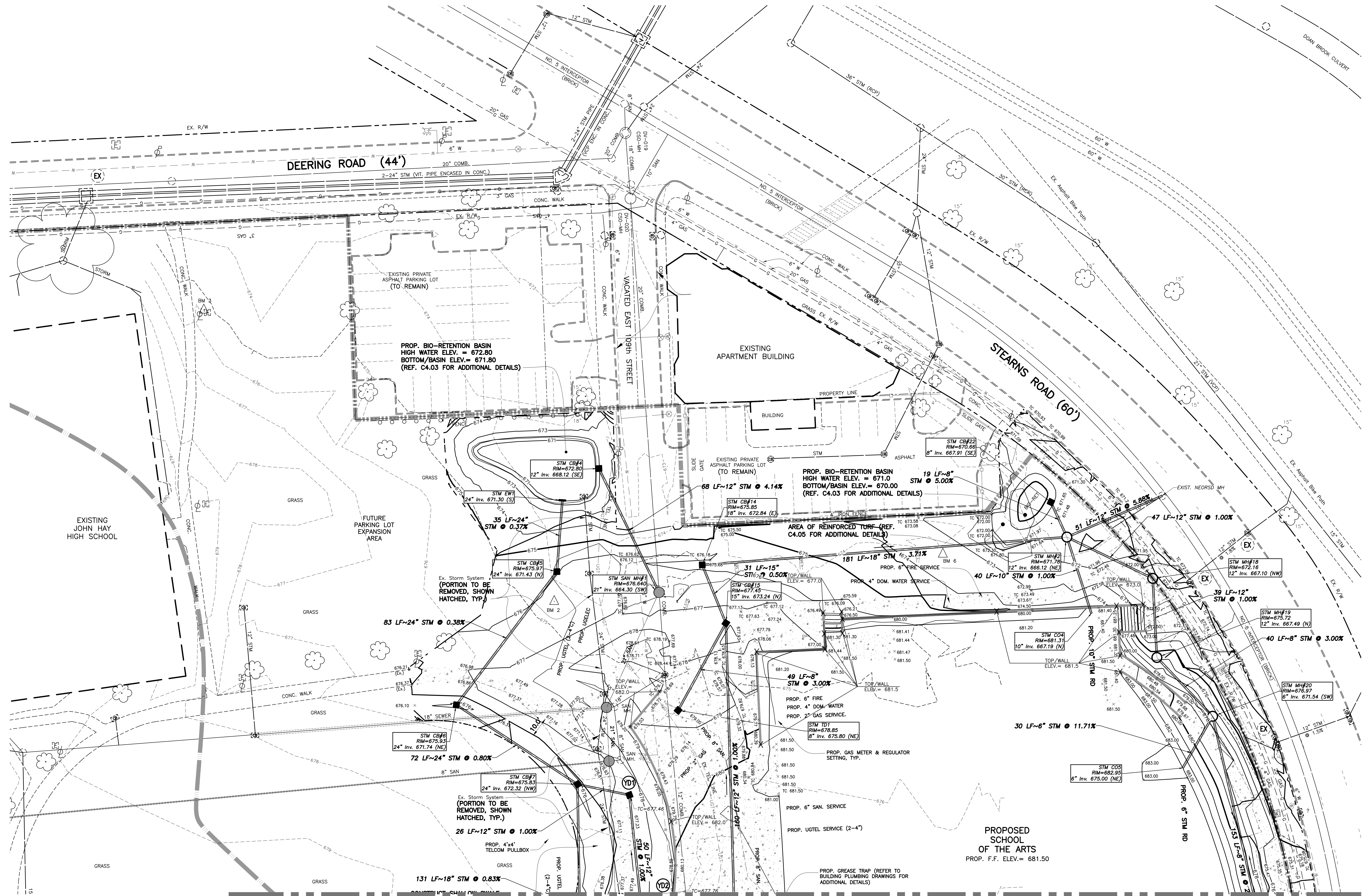
Sincerely,



Mary E. Maciejowski,
Permit Program Manager

C: Elie Ramy/Cleveland WPC
Fred Rodgers, OHGR
Anne Hartman, Moody Nolan
Doug Lopata, NEORSD

Kyle Dreyfuss-Wells, NEORSD
Betsy Yingling, NEORSD
Dave Ritter, NEORSD
File



SEE SHEET C2.02 FOR CONTINUATION OF PLAN VIEW

STORM SEWER

The Contractor must obtain sewer permits from the City of Cleveland, Division of Water Pollution Control, prior to performing the sewer work.

Pipe specification for the plan improvements may be in accordance with the following, except where the pipe material is specifically called out on the plan and profiles:

- Reinforced concrete pipe ASTM C-76 (ODOT 706.02). (12 thru 18" diameter pipe - Class IV) (24" diameter pipe - Class III)
- Smooth-lined corrugated polyethylene pipe (ODOT 707.33) (6" thru 24" diameter pipe)

All bedding shall be in accordance with ODOT Standard Drawing DM-1.4 for Type B & C Conduit.

The flow in all sewers, drains, field tiles and watercourses encountered shall be maintained by the Contractor at his expense, and whenever such watercourses and drains are disturbed or destroyed during the prosecution of the work, they shall be restored by the Contractor at his own cost and expense to a condition satisfactory to the Owner.

All drain tile and storm sewers damaged, disturbed, or removed as a result of the Contractor's operations shall be replaced with the same quality pipe or better, maintaining the same gradient as existing. The drain tile and/or storm sewer shall be connected to the curb subdrain, storm sewer system or provided with an outlet into the roadway ditch as applicable. Replaced drain tile/storm sewer shall be laid on compacted bedding equal in density to surrounding stratum. Replacement shall be done at the time of the backfill operation. Cost of this work to be included in the price bid for the storm sewer improvements.

All existing inverts along with the proposed top of casting elevations shall be verified by the Contractor prior to construction of the sewer. It is the Contractor's responsibility to schedule all needed inspections with the applicable agencies.

N.E.O.R.S.D. NOTES:

THE DISTRICT HEREBY AUTHORIZES THIS CONNECTION TO ITS FACILITY PROVIDED THE FOLLOWING CONDITIONS ARE MET.

* PROVIDE PRE-CONSTRUCTION AND POST-CONSTRUCTION VIDEO INSPECTION OF THE INTERCEPTOR SHOWING A FOOTAGE MEASUREMENT FROM THE EITHER THE UPSTREAM OR THE DOWNSTREAM MANHOLE AND EXTENDING A MINIMUM OF 20 FEET PAST THE CONNECTION POINT. THE FORMER SHALL BE SUBMITTED TO THE DISTRICT FOR APPROVAL PRIOR TO THE COMMENCEMENT OF WORK.

* THE CONNECTION SHALL BE MADE THROUGH A PROPERLY SIZED CORED HOLE. IF THE CONNECTION IS TO A REINFORCED CONCRETE OR VITRIFIED CLAY PIPE THEN THE LATERAL SHALL BE CONNECTED TO THE SEWER USING A MANUFACTURED BOOT THAT MAKES A WATERTIGHT CONNECTION. IF THE CONNECTION IS TO A BRICK SEWER THEN THE LATERAL SHALL BE CONNECTED BY WRAPPING A WATERSTOP MATERIAL SUCH AS A VOLCLAY RX101 OR EQUAL AROUND THE LATERAL. 2 WRAPS MINIMUM IN ACCORDANCE WITH THE ATTACHED DETAIL. IF WATERSTOP MATERIAL IS USED, THE ANNULAR SPACE BETWEEN THE SEWER WALL AND THE LATERAL SHALL BE FILLED WITH HYDRAULIC CEMENT. EITHER TYPE OF CONNECTION SHALL THEN BE ENCASED IN CONCRETE.

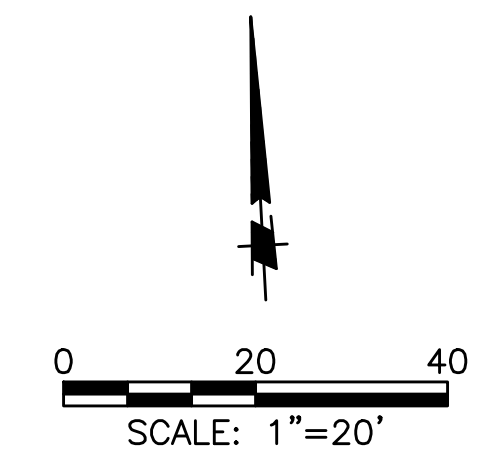
THE FOLLOWING CONDITIONS APPLY TO EITHER THE USE OF AN EXISTING LATERAL OR THE CONSTRUCTION OF A NEW LATERAL.

- * THE OWNER SHALL WARRANT THAT THE CONNECTION WILL BE WATERTIGHT FOR A PERIOD OF ONE YEAR.
- * THE CONTRACTOR IS RESPONSIBLE FOR ANY AND ALL DAMAGE TO THE INTERCEPTOR AS DETERMINED BY THE DISTRICT.
- * THE CONTRACTOR SHALL PREVENT ANY DEBRIS FROM ENTERING THE SEWER. ANY DEBRIS ENTERING THE SEWER SHALL BE REMOVED BY THE CONTRACTOR.
- * THE CONTRACTOR SHALL PROVIDE AN "AS-BUILT" DRAWING OF THE CONNECTION UPON A COMPLETION OF THE WORK.
- * THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ANY AND ALL PERMITS REQUIRED FOR THE WORK.
- * A 72-HOUR NOTICE SHALL BE PROVIDED TO MR. ERIC PARHAM OR MR. THOMAS MADEJ (216-641-6000) TO SCHEDULE A DISTRICT INSPECTOR FOR THE CONNECTION.
- * ALL SUBMITTALS SHALL BE SENT TO THE DISTRICT ATTN: MR. BRIAN PAGE AT THE LETTERHEAD ADDRESS.

EARTHWORK

All trenches shall be constructed with clay trench dams at points just outside of the modified floodplain @ elevation 679.32 (on the building side of the new floodplain line).

Undercut areas within the modified floodplain which are closer than 20 feet from the edge of the new CSA basement excavation shall require installation of a minimum 12-inch-thick clay cap below any proposed pavements or topsoil layers.



#	Date	Change Description
		CONSOLIDATION SET + RFI RESPONSE
	2/21/14	RFI 800110 NEORSO SUBMITTAL

Cleveland School for the Visual and Performing Art
 2084 STEARNS ROAD, CLEVELAND, OHIO 44106
 FOR: **Cleveland Metropolitan School District**
 Vision to Victory

P:\09694_CSA\CADD\border-info\Info-1328890.dwg
 4415 Euclid Avenue Phone: (216) 432-0696
 Suite 100 Fax: (216) 432-1699
 Cleveland, Ohio 44103 www.moodynolan.com

Dwg. Coord.: DAS Tech. Coord.: MSL 09694

SITE GRADING
 Site Development Bid Package 04/29/13

C2.01

SEWER CONNECTION PERMIT

PERMIT NO:
20140010

DATE:
Jul 15, 2014

Subject to the terms and conditions printed on the approval letter referenced below, permission is granted to:

APPROVAL LETTER NAME:	<i>Cleveland School of the Arts - Cleveland, Ohio Stormwater Management and Connection Approval</i>		
COMMUNITY:	Cleveland	SITE ADDRESS:	2064 Stearns Road, Cleveland OH 44106
ISSUED TO:	Mr. Richard Keener, P.E. Moody Nolan		

SEWER CONNECTION INFORMATION

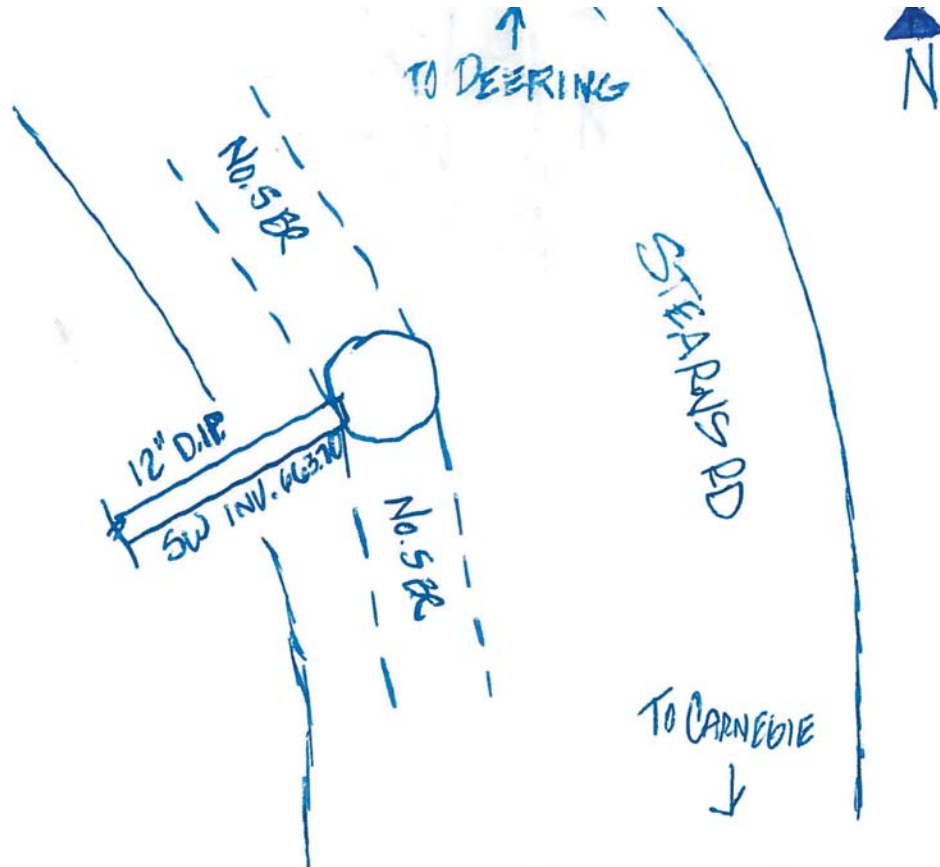
SEWER LAYER/CONTRACTOR:	Chieftain Trucking and Excavating	SIZE/MATERIAL:	12" Ductile Iron
WYE OR LATERAL	0 FEET	N/A	FROM REFERENCE MANHOLE
<small>(DISTANCE)</small>		<small>(DIRECTION)</small>	<small>(ASSET ID)</small>

REFERENCE MH SURVEY COORDINATES: N: 670052.39 E: 2212517.15

COMMENTS:

Contractor filled annular space between new D.I.P. pipe and brick MH with hydraulic cement from outside of barrel. Contractor then formed concrete collar around new D.I.P. pipe on outside of barrel.

WYE OR LATERAL DETAILS:



INSPECTED BY:
(NAME / DATE)

A. Parone

A. Parone Aug. 21, 2014

SEWER CONNECTION PERMIT

PHOTO 01: Existing condition



PHOTO 02: New 12" DIP connection



PHOTO 03: Annular space filled with hydraulic cement



PHOTO 04: Concrete collar formed



PHOTO 05:

PHOTO 06: