



## **Route 7 Corridor Improvements Project Initial Financial Plan**

**July 29, 2019**

State Project Numbers:

0007-029-942, P101, R201, C501, B610, D606, D608

0007-029-225, P101, R201, C501, D607

UPC Numbers: 99478 and 106917

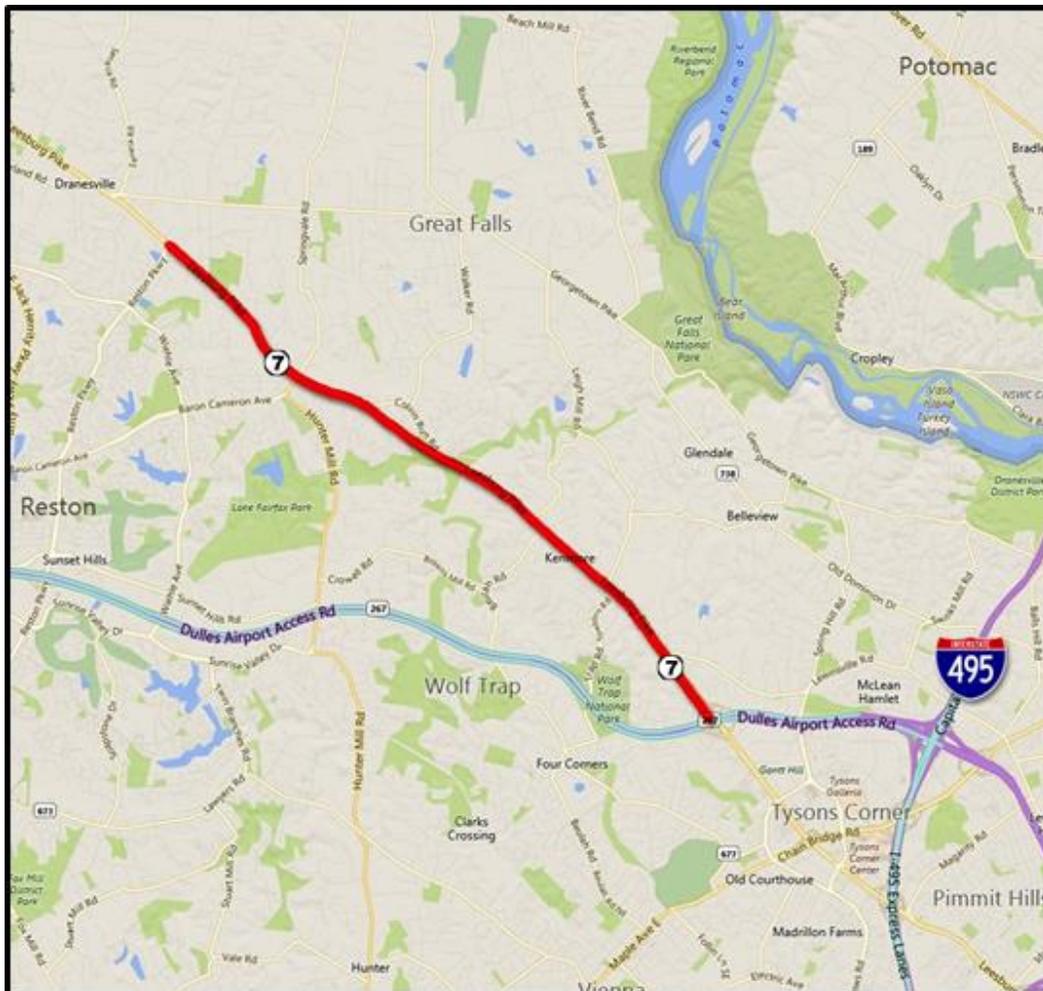
**Table of Contents**

<b>1. Project Description:</b> .....	<b>3</b>
<b>2. Schedule</b> .....	<b>5</b>
Project Schedule Overview .....	6
<b>3. Project Cost</b> .....	<b>6</b>
Project Cost by Phase .....	7
<b>4. Project Funds</b> .....	<b>7</b>
Summary of Project Funding by Source.....	8
<b>5. Financing Issues</b> .....	<b>9</b>
<b>6. Cash Flow</b> .....	<b>10</b>
<b>7. P3 Assessment</b> .....	<b>10</b>
<b>8. Risk and Response strategies</b> .....	<b>10</b>
<b>9. Annual update cycle</b> .....	<b>12</b>

**1. PROJECT DESCRIPTION:**

The project is located in Fairfax County, Virginia, and involves widening Route 7 from four to six lanes, intersection and access management improvements, and adding shared-use paths on both sides. The project includes westbound triple left-turn bays at the existing intersection of Route 7 and Baron Cameron Avenue/Springvale Road as opposed to the as-planned grade-separated interchange that would have carried three through lanes of eastbound Route 7 beneath connecting roadways. This partial grade-separated interchange was removed from the project scope as a cost savings measure.

The project also includes replacement of Route 7 over Difficult Run Bridge (at a higher elevation to mitigate flooding), Colvin Run (stream) relocation and associated retaining wall, and a pedestrian underpass beneath Route 7 near the Colvin Run Mill. The project limits are from Reston Avenue to Jarrett Valley Drive, for a total length of approximately 6.9 miles. The Project consists of two (2) UPCs: 99478 and 106917: UPC 99478 represents the eastern portion from Difficult Run to the Jarrett Valley Drive; UPC 106917 represents the western portion from Difficult Run to Reston Parkway.



Location Map

In accordance with the National Environmental Policy Act and 23 CFR 771, an Environmental Assessment (EA) was prepared under the Preliminary Engineering (PE) phase, UPC 52328. The Federal Highway Administration (FHWA) approved the Route 7 Corridor Improvements Environmental Assessment (EA) for public review and comment on October 6, 2016. The Design Public Hearing for the project was held on November 15, 2016. Any changes to the Build Alternative resulting from agency coordination as well as public comments received and VDOT responses were incorporated in a revised EA. The FHWA subsequently issued a Finding of No Significant Impact (FONSI) decision on November 15, 2017. The Project is being administered through the design-build project delivery process. A Request for Proposals (RFP) was advertised on November 21, 2017, with the closing date for Project submittals of March 28, 2018. None of the offers received from the prospective design-build teams, however, were within the established competitive price range and award was delayed until revisions to the Build Alternative design were investigated and additional \$80M in funding identified to reconcile the Project estimate with the budgeted allocation, while ensuring the purpose and need of the Project still remained intact. The proposed partial interchange of Route 7 at Baron Cameron Avenue/Springvale Road was modified to an at-grade intersection. Offers received based on this revision were within the established competitive price range and the Project was awarded on July 18, 2018.

In accordance with the NEPA and §23 CFR 771.129(c), an environmental evaluation was prepared to determine whether the impacts resulting from changes in the Route 7 Corridor Improvement Project were significant. This evaluation focused on design changes to the Build Alternative for the project since the FONSI decision. A Public Notice of the availability of the Environmental Studies Document was published in three locally available newspapers; however, no comments were received. On April 12, 2019, FHWA concurred with VDOT's recommendation that the project continues to meet the criteria for an EA and the original FONSI decision remains valid. Public Information meetings were held on May 7, 2019, and May 14, 2019, to share information about the design-build phases of the project, including design progression and schedule, and the transition to construction work, as well as the change from a partial interchange at Baron Cameron Avenue to at-grade intersection improvements.

Additional information on the Route 7 Corridor Improvement Project can be found on the project website (<http://www.virginiadot.org/projects/connectroute7.org/>). The website provides information regarding project description, purpose, maps, implementation schedule, information presented at the Public Information Meeting and Design Public Hearings (including the Environmental Assessment documentation/technical reports), and contact information for the project team. Additionally, planned lane closures, typical sections, and links to the coordinated Washington Gas work in the corridor are reflected in the website, which is updated weekly or as applicable.

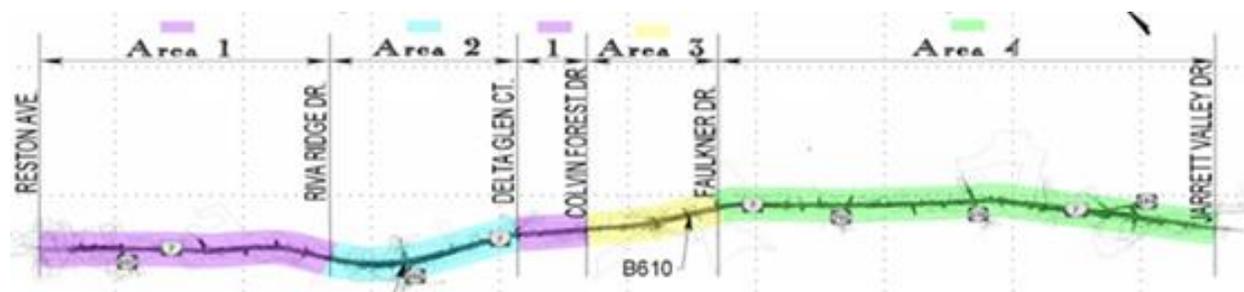
In order to identify potential impacts to Waters of the U.S. (WOUS) that could be associated with the stream relocation alternatives being evaluated, an in-office review of available resource information was conducted to evaluate the potential for regulated features to occur within the study area. Data reviewed included U.S. Geological Survey (USGS) topographic

mapping, National Wetland Inventory (NWI) mapping, U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) soils mapping and data, and aerial imagery (USGS, 2017; USFWS, 2017b; and USDA, 2017). Following the in-office review, field delineation was conducted in July 2015, to identify jurisdictional WOUS that occur within the study area. The delineation was performed in accordance with the 2012 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Eastern Mountains and Piedmont Region (*Version 2.0*) and the United States Army Corps of Engineers (USACE) 1987 Wetland Delineation Manual and subsequent applicable regulatory guidance (USACE, 1987 and USACE, 2012). On December 22, 2015, a USACE field visit was conducted to verify the limits of jurisdictional WOUS within the study area. An in-office review of delineation material occurred on March 23, 2017, and a preliminary jurisdictional determination (PJD) was issued by the USACE on the same day. All necessary water quality permits will be obtained from regulatory agencies by the Design-Builder.

A Preliminary Noise Analysis was conducted in September 2016; and the final barrier location(s) and dimension(s) will be determined during the final design noise analysis and a Noise Abatement Design Report (NADR), both of which will be completed by the Design-Builder and submitted to VDOT and FHWA for approval.

## 2. SCHEDULE

Right-of-Way (ROW) acquisition and utility relocations are on the schedule's critical path (or longest path). There are two hundred and thirty (230) parcels from which ROW is needed for the project. There are twenty (20) separate utilities on the project that require relocation of sections or in whole for the roadway widening and improvements to occur. Right-of-way acquisitions have been prioritized for utility relocations and phases of the project.



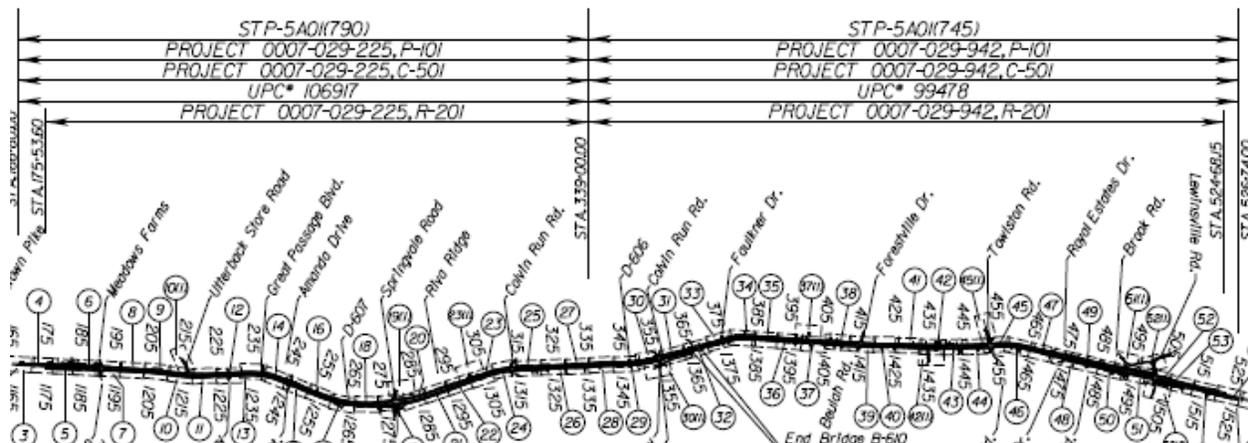
The project has been divided into four (4) distinct areas for work as reflected in the above graphic. This has allowed for early acquisition of right-of-way from thirty-one (31) parcels and some early construction activities to occur within existing right-of-way in area 1, where no utility easements are needed. This has been facilitated by the approval of Early Right-of-Way plan and Advance TTC plan approvals, including NEPA re-evaluation for ROW and PS&E for these plans. The commencement of construction within existing VDOT ROW in area 1 is reflected in the schedule below for UPC 106917.

**PROJECT SCHEDULE OVERVIEW**

PROJECT SCHEDULE OVERVIEW (QTR/YEAR)																														
Task	Start	Finish	2018				2019				2020				2021				2022				2023				2024			
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4				
Notice to Proceed	Jul-18		★																											
UPC 99478	PE-Design	Jul-18	Aug-19																											
	RW/Utilities	Oct-19	Aug-21																											
	Construction	Oct-19	Jun-24																											
UPC 106917	PE-Design	Jul-18	Aug-19																											
	RW/Utilities	Oct-19	Aug-21																											
	Construction	Oct-19	Jun-24																											
Construction Complete		Jun-24																								★				

**3. PROJECT COST**

The total project cost is \$313,871,738. The project cost by phase and by UPC can be found in the table within this report section, in year-of-expenditure dollars. A graphic depicting the break out of the UPCs and project numbers is reflected below. The estimate includes all costs necessary to perform the preliminary engineering (including the cost of NEPA and other environmental documentation), right-of-way, environmental commitments (including, among other things, noise abatement), construction, project management, public outreach, traffic management system (TMS) improvements, congestion management plans, and costs of external third party work, including utility relocations. The construction cost estimate was prepared using TRNS\*PORT, and includes contingency and construction engineering and inspection. The preliminary engineering phase is complete and expenditures are consistent the preliminary engineering phase estimate. The ROW phase was estimated using VDOT’s PCES system, with contingency included.



**PROJECT COST BY PHASE**

UPC # 99478 (Difficult Run east)

UPC	Phase	Estimate	Current Expenditures (04/30/2019)	Balance to Complete
99478	PE	\$3,053,637	\$3,053,637	0
	RW	\$12,254,273	\$33,030	\$12,221,243
	CN	\$172,606,202	\$15,081,835	\$157,524,367
	TOTAL	\$187,914,112	\$18,168,502	\$169,745,610

UPC # 106917 (Difficult Run west)

UPC	Phase	Estimate	Current Expenditures (04/30/2019)	Balance to Complete
106917	PE	\$1,238,920	\$1,238,920	0
	RW	\$15,884,127	\$25,091	\$15,859,036
	CN	\$108,834,579	\$9,788,649	\$99,045,930
	TOTAL	\$125,957,626	\$11,052,660	\$114,904,966

Grand Total – UPC# 99478 & 106917

UPC	Phase	Estimate	Current Expenditures (04/30/2019)	Balance to Complete
99478 & 106917	PE	\$4,292,557	\$4,292,557	0
	RW	\$28,138,400	\$58,121	\$28,080,279
	CN	\$281,440,781	\$24,870,484	\$256,570,297
	GRAND TOTAL	\$313,871,738	\$29,221,162	\$284,650,576

**4. PROJECT FUNDS**

This project is currently funded with Regional Surface Transportation Program (RSTP), Northern Virginia Transportation Authority (NVTA), Smart Scale, Commonwealth Transportation Board (CTB), Garvee and Fairfax County funds. This project has been developed utilizing the federal process.

**SUMMARY OF PROJECT FUNDING BY SOURCE**  
(Amounts in 000's)

Funding Source	Previous	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Total	
<b>UPC # 99478 &amp; 106917</b>	<b>FEDERAL</b>								
	RSTP (STP Regional/MAP 21 Northern Virginia)	38,940	17,447	16,059	10,560	6,000	5,499	0	94,505
	DGP (1): STP STWD	2,198	0	0	872	0	0	0	3,070
	DGP (1): STP STWD Soft Match	550	0	0	218	0	0	0	768
	HPP (1): STP STWD	0	0	6,537	622	0	0	0	7,159
	HPP (1): STP STWD Soft Match	0	0	1,634	156	0	0	0	1,790
	<b>STATE</b>								
	RSTP Match	9,735	4362	4015	2640	1500	1375	0	23,627
	DGP (1): DGP - State	2,510	0	0	1,583	13,192	0	0	17,285
	CTB Formula: CTB District Grant	183	0	0	0	0	0	0	183
	<b>OTHER</b>								
	DGP (2): GARVEE - District Grant	30,432	17,891	15,891	7,520	0	0	0	71,734
	HPP (2): GARVEE - High Priority	50,306	5,326	1,850	167	0	0	0	57,649
	<b>LOCAL</b>								
	Accounts Receivable: NVTA AR Funds	1,500	0	0	0	0	0	0	1,500
	Accounts Receivable: Primary	755	0	0	0	0	0	0	755
	Accounts Receivable: NVTA AR Funds	8,500	0	0	0	0	0	0	8,500
	Local Project Contributions: Primary	25,350	0	0	0	0	0	0	25,350
	<b>Total</b>	<b>170,959</b>	<b>45,026</b>	<b>45,986</b>	<b>24,338</b>	<b>20,692</b>	<b>6,874</b>	<b>0</b>	<b>313,875*</b>

\* Total funding rounds to 313,872,000. The difference is due to rounding

**Federal Fund Sources and Special Funding Techniques**

As summarized in the Summary of Project Federal Authorizations Table 1 below, the preliminary engineering (PE) phases for UPC 99478 and 106917 were authorized by the Federal Highway Administration (FHWA) under federal project number STP-5A01(745) and STP-5A01(790).

**SUMMARY OF PROJECT FEDERAL AUTHORIZATIONS**

<b>Table 1</b>						
<b>Project Authorization Summary as of April 30, 2019</b>						
<b>Federal Project</b>	<b>UPC(s)</b>	<b>Phase</b>	<b>Date Authorized by FHWA</b>	<b>Cost</b>	<b>Federal Funds</b>	<b>Advance Construction</b>
STP-5A01(745)	99478	PE	9/23/2016	\$0	\$0	\$0
		RW	11/21/2017	\$0	\$0	\$0
		CN	11/21/2017	\$108,395,227	\$10,595,132	\$95,151,312
	110377	GARVEE Debt Service	9/23/2016	\$110,991,476	\$5,557,741	\$105,433,735
<b>Subtotal</b>				<b>\$219,386,703</b>	<b>\$16,152,873</b>	<b>\$200,585,047</b>
STP-5A01(790)	106917	PE	2/22/2017	\$0	\$0	\$0
		RW	11/21/2017	\$0	\$0	\$0
		CN	11/21/2017	\$88,699,299	\$0	\$88,699,299
	110378	GARVEE Debt Service	2/23/2017	\$52,738,726	\$4,823,423	\$47,915,302
<b>Subtotal</b>				<b>\$141,438,025</b>	<b>\$4,823,423</b>	<b>\$136,614,601</b>
<b>Total</b>				<b>\$360,824,728</b>	<b>\$20,976,296</b>	<b>\$337,199,648</b>

**5. FINANCING ISSUES**

- This project is currently funded with RSTP, NVT A, Smart Scale, CTB, GARVEE and Fairfax County funds. VDOT does not anticipate any issues with the funding sources for the project.
- This project has been developed utilizing the federal process.
- The debt service for the GARVEE bonds is covered under UPC# 110377 & 110378.

## 6. CASH FLOW

An annual schedule of cash revenues and expenditures, through project completion, can be found in the table below:

Expenditures		Previous thru FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Total
UPC # 99478 & 106917	PE	4,293	0	0	0	0	0	0	4,293
	Right of Way	64	221	6,996	6,720	6,720	6,724	694	28,139
	Construction	34,034	70,252	48,285	49,308	48,453	29,781	1,327	281,440
Cumulative Expenditures		38,391	108,864	164,145	220,173	275,346	311,851	313,872	313,872
Total Annual Allocations		170,958	45,026	45,985	24,337	20,692	6,874	0	313,872
Cumulative Allocations		170,958	215,984	261,969	286,306	306,998	313,872	313,872	313,872
Cash Flow Per Year		132,567	107,120	97,824	66,133	31,652	2,021	0	0

## 7. P3 ASSESSMENT

A P3 delivery was not pursued for this project due to the fact that Route 7 is not planned as a toll road, and there are not sufficient tax district revenues to fund the project. Design-Build delivery, however, is being utilized for project delivery in order to accelerate project completion to meet public expectation.

## 8. RISK AND RESPONSE STRATEGIES

A risk assessment workshop has been conducted and associated mitigation strategies have been developed to address the significant risks identified for this project. The most significant risk categories are as follows:

### A. Right of Way Acquisition:

**Background:** ROW on this project entails two hundred and thirty (230) parcels of which one (1) is a residential relocation. This magnitude of ROW parcels is significant and is being prioritized to allow for utility relocation and construction phasing for the project.

**Mitigation Measures:** An advance meeting was held with VDOT’s ROW section (Les Griggs and Richie Stuart) as well as with Shirley Contracting on July 31, 2018, to discuss early ROW plan approval and early acquisition of critical parcels. A second meeting is planned for Mid-Summer 2019 to have a ROW staff meet and discuss roles and responsibilities and outline the prioritization of parcels and the assignment of staffing to meet the project schedule with the anticipated plan approval later this year.

**Status:** Open

B. Permit Acquisition:

Background: Coordination with the agencies for a preliminary Least Environmentally Damaging Practicable Alternative (LEDPA) resulted in Colvin Run relocation alternative as an articulated concrete block (ACB) lined channel, which reduced impacts of forested wetlands by 80%. During the May 2019 public information meetings, a number of citizens and elected officials reached out to USACE, the VA Secretary of Transportation, and others to reconsider a natural stream channel design. If the USACE or EPA revise an earlier decision and instead support a natural stream channel design instead, it would result in a significant change to the contract requirements (with impacts to the project schedule and budget).

Mitigation Measures: Additional coordination between VDOT, the Design-Builder and the regulatory agencies is underway to address the permitting and associated requirements.

Status: Open

C. Interfaces with Adjacent Projects:

Background: The Route 7 corridor has several projects being constructed concurrently. Particular interfaces are:

- Waltonwoods – Singh Oberlin LLC

A meeting with the Developer of Waltonwoods occurred on December 11, 2018. The site plan for this Developer had already been approved by Fairfax County for which several conflicts with the Route 7 widening work were identified. Subsequent to this meeting, the Developer has postponed their start of construction date such that the conflicts between projects have been mitigated.

- Grantstone – Toll Brothers

A meeting with the Developer occurred on December 7, 2018. The development is by right and the site plan has been approved by Fairfax County. The Route 7 Corridor Project has provided consent for issuance of VDOT tie-in permits on Towlston Road.

Mitigation Measures: Additional meetings are scheduled with both developers to include the County, VDOT Land Use sections and the designers of the developments and the Route 7 Designer to work through any issues that might arise, however at this time, all concerns have been addressed.

Status: Open

D. Washington Gas Transmission Line construction:

Background: Washington Gas is upgrading their transmission line along the Route 7 Corridor concurrent with the Route 7 Corridor construction. The upgrade is to replace the existing 16" line with a 24" line for the full 6.9 miles of the project. The replacement gas line is being installed within VDOT's Right-of-Way.

Mitigation Measures: Washington Gas upgrade plans are reviewed and coordinated with the Route 7 Corridor Design-Builder and VDOT, such that the relocation is not in conflict with the Route 7 Corridor design. Additionally, work is coordinated for location and schedule with the Route 7 Corridor Project to avoid working in the same locations at the same time. This coordination is on-going with bi-weekly meetings occurring between VDOT, the Design-Builder and Washington Gas throughout the life of the project.

Status: Open

## 9. ANNUAL UPDATE CYCLE

The submission date of the Initial Financial Plan is July 1, 2019. The first annual update will be submitted by July 1, 2020 and will be based on a "data as of" date of April 30, 2020. Future annual updates will be submitted by July 1st of that year, with a "data as of" date of April 30th of that year.